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FIG.-1.

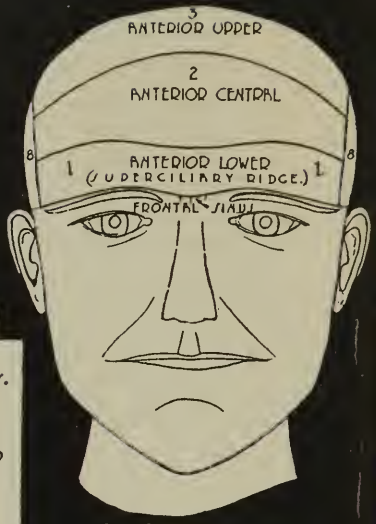

FIG.-2.

·HUMANOLOGY·
CHART·

FIG.-1-SIDE-HEAD
- 2-FRONT -
- 3-TOP -
- 4-BACK -
- 5-BRAIN -

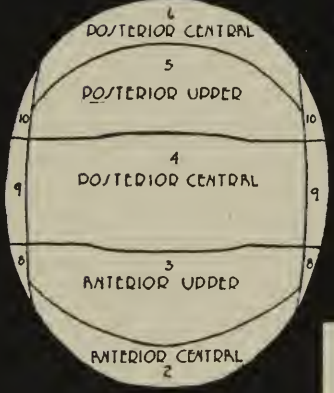

FIG.-3.

DISTRICTS OF THE BRAIN

PLATE-6.

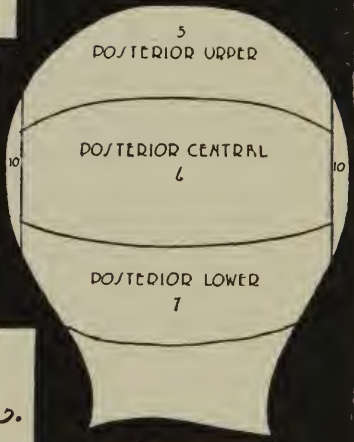

FIG.-4.

INDEX TO FIG. 5.

NO.		
1	MOTOR AREA OF	TOES
2	" " "	FOOT
3	" " "	LEG
4	" " "	THIGH
5	" " "	BODY
6	" " "	SHOULDER
7	" " "	ARM
8	" " "	ELBOW
9	" " "	WRIST
10	" " "	FINGERS
11	" " "	NECK
12	" " "	EYELIDS
13	" " "	CHEEKS
14	" " "	MOUTH
15	" " "	JAWS
16	" " "	TONGUE

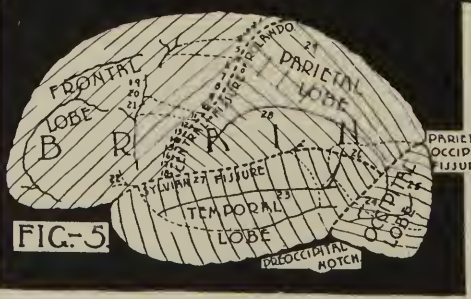

FIG.-5.

INDEX TO FIG. 5.

NO.		
17	MOTOR AREA OF	PALATE
18	" " "	LARYNX
19	" " "	HEAD
20	" " "	EYES
22	" " "	WRITING
22	" " "	SPEECH
23	AUDITORY SPEECH	
24	HIGHER VISUAL AREA	
25	LOWER VISUAL AREA	
26	VISUAL SPEECH & READING	
27	AUDITION	
28	CUTANEOUS AND MUSCULAR SENSATIONS	
29	STEREOGNOSIS OR ABILITY TO RECOGNIZE OBJECTS BY TOUCH	

HUMANOLOGY CHART

TEXT BOOK OF

HUMANOLOGY

THE COMPLETE SCIENCE

OF

HUMAN-ANALYSIS

ANALYZING PEOPLE ON SIGHT

COMPRISING

ADAMS' HUMAN SCALE
PSYCHOMACHY
PHRENOLOGY
PHYSIOGNOMY
PATHOGNOMY
ANTHROPOLOGY
BIOLOGY
ETHNOLOGY
ANATOMY
PHYSIOLOGY

By

JOHN BRYCE ADAMS

PRESIDENT OF THE PSYCHOMACHY AND BIOLOGICAL RESEARCH SOCIETY

(Over one hundred and eighty illustrations all drawn by the Author)

FOR SCHOOLS AND COLLEGES

First Edition

Published by

THE CENTURY HUMANOLOGISTS,

CLEVELAND, OHIO, U. S. A.

BF
850
A214t
1922

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PREFATORY

The Reason Thereof

And God said, "Let us make man in our image, after our likeness, and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth."—Genesis 1-26.

In the most serious interest of humanity; to arouse the Human Mind to a realization of the manifest wonders of fellow human beings, and to add that ever-necessary attribute, perception of human nature, to the multitude of other faculties possessed, by the greatest of God's creations, the Human Intellect.

The Scientist admonishes you not to accept any of the hypotheses, herein set forth, until you have proven by practical observations that they are correct.

Commonplace argument and cynical criticism, of a deep subject, proves very little; while serious application to a study of all its homogeneous parts, and careful contemplation, thereafter, prepares one for intelligent discussion, out of which comes wealth of wisdom.

If this volume is the means of bringing to light, for consideration, many more important questions than it answers, it will have served a great purpose in the field of analytic science; for to arouse interest, stimulate curiosity and inquiry are the main objects of teaching; and the reasons thereof.

John Bryce Adams.

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CONTENTS

			Page
Chapter	I.	**Introduction to Humanology**	10
		Application and Use of The Science	13
"	II.	**Phrenology** The Human Brain	15
"	III.	Districts of the Brain	31
"	IV.	**Anthropology** The Human Scale	37
"	V.	The Ultra-Physical Nature	47
"	VI.	The Physical Muscular Nature	55
"	VII.	The Muscular Mental Nature	63
"	VIII.	The Mental Muscular Nature	71
"	IX.	The Mental Affirmative Nature	79
"	X.	The Ultra-Mental Nature	89
"	XI.	The Combined Natures	94
"	XII.	**Physiognomy** The Head	101
"	XIII.	The Forehead	106
"	XIV.	The Eyes, Eyebrows and Eyelashes	115
"	XV.	The Nose	125
"	XVI.	The Ears	140
"	XVII.	The Mouth, Teeth and Lips	147
"	XVIII	Cheeks, Jaws, Chins, Necks, Wrinkles	156
"	XIX.	Hair and Ethnology	166
"	XX.	**Pathognomy**	170
"	XXI.	Ten Golden Rules of Human Analysis	178

ILLUSTRATIONS

Plate No. 6—Frontispiece

Page

Districts of The Brain 4

Plate A

The Ultra-Physical Nature 46

Plate B

The Physical Muscular Nature 54

Plate C

The Muscular Mental Nature 62

Plate D

The Mental Muscular Nature 70

Plate E

The Mental Affirmative Nature 78

Plate F

The Ultra-Mental Nature 88

Plate No. 1

Heads and Foreheads 98- 99

Plate No. 2

Eyes, Eyebrows and Eyelashes 112-113

Plate No. 3

Noses 130-131

Plate No. 4

Mouth, Teeth and Lips 144-145

Plate No. 5

Cheeks, Jaws, Chins, Facial Peripheries, Brain and Head Sections 160-161

INTRODUCTION

Beware what spirit rages in your breast;
For ten inspired, ten thousand are possessed!—Roscommon.

HUMANOLOGY

Life is a journey through the affairs of the world; and death the greatest experience.

CHAPTER I.

Humanology is the modern science or the periscope through which we observe the Spirit, the Soul, or the Immortal, Non-earthly Principle of humanity. It is a language which we read through the biological structure, features, outlines, profiles, contours and peripheries of the human physique and their psychological relationships to the Human Spirit.

This is the original, condensed treatise on the great accumulation of knowledge, that has proven the comprehensive general laws and made possible the bringing to light, for the use of humankind, this science; echoes of which have trickled down through the ages. In this modern era the author has been enabled, *through countless observations* of human nature, throughout France, Italy, Switzerland, Belgium, England, Ireland, Scotland, Wales, and North America, to bring within the grasp of people of today an *exact system of reasoning* by which the moods, traits, characteristics, talents, eccentricities, idiosyncrasies and natures can be readily discovered and analyzed.

If the science is applied in all its many angles without error, mistakes in studied diagnosis will not occur. It is conceded, however, that as in all great basic sciences, human kind, even in view of exact principles to work with, oftimes omit careful adherence to detail in making successful application of the knowledge. To attain certain results, individuals vary in their ability, but *faithful application to principles* and *constant observation* will unquestionably bring success to any intelligent student of the science.

In the exhaustive research made by the founder of the science of Humanology, it was ascertained that no records exist in proof of the fact that isolation of the Spirit, Brain and Mind, and analyses of mental phenomena with the subjects of Phrenology, Pathognomy, Physiognomy, Psychomachy and that of The Six Pure Natures of the human race, have ever been constructed to form a perfect analogous symbol of human nature. All of this is designed within the boundaries of Humanology; giving to the science perfect appointments in all its branches.

Without a comprehensive relationship being fully established, throughout this entire work, it would be impossible to determine to a sufficient degree of correctness, the many facts serving to make an accurate diagnosis of human nature.

In previous hypotheses advanced by Phrenologists of more or less repute, the author finds that failure in the success of many theories advanced, was due primarily to lack of comprehensive knowledge of the isolation of pure natures and the differentiation of the Spirit, Brain and Mind. It is conceded, however, that they discovered some valuable truths. Some scientists have failed to include Physiognomy, others omitted Phrenology, *while the thorough diagnosis of the Six Pure Natures has never before been propounded.*

Through the science of Humanology the character of both friends and strangers, and particularly of one's self can be analyzed more thoroughly than by any former means. In a few moments one can read the Nature of a person and become more perfect in drawing clear and accurate conclusions than *years* of acquaintanceship will produce.

The reason for some people liking each other, either to the extent of acquaintance, friendship, or love; and some folks disliking each other, either to the extent of indifference, abhorrence or contempt, is owing to the presence of traits, moods and characteristics favorable or unfavorable that are ever observable to the lay minds, from sources

that are unconsciously made use of; such as features, temperament, customs or expressions.

Human beings generally have an inherent sense of perception, and intuition; and humanity in general uses a certain limited amount of Humanology in every day life; as individuals associated with one another. It is true, that in exceptional cases, some lay minds attain, unknowingly, a moderate amount of analyzing ability through their own systematic and logic methods of reasoning.

People are always weighing each other's worth, fitness and condition. We are never free from this form of contemplation, and it, therefore, behooves us all to come first to a thorough understanding of ourselves before stepping out into the field of observation.

It is quite possible for the average mind, through perception, to read character to a limited extent; for instance, one can easily differentiate between a scholar and a halfwit, or a professional man and a laborer, but the *test* of reasoning is to analyze with correctness persons whose signs of detection are not nearly so boldly displayed; or when many conflicting stories are told by the features, temperament, general structure and condition of the physique. It is under these circumstances that the science of Humanology begets surprising results.

The Author would respectfully request that students, in the study of the science, confine themselves strictly to the hypotheses upon which it is builded; entirely eliminating from their minds the old, disapproved, half truths and time worn errors handed down by theorists in the early history of the study of human nature.

It has taken years to perfect the science of Humanology and endless time and efforts have been necessary to produce this text book; which is the most thorough, condensed and readily accessible volume, by which a comprehensive knowledge of the science can be obtained. All superfluous detail has been omitted and the truths, facts, and principles have been confined to the most practical and direct language; so that any person of a reasonable

degree of mentality can by earnest effort, within a comparatively short time, become a proficient diagnostician.

Humanology takes its name from the direct findings of the scientist John Bryce Adams, who is the founder. It is the answer to his famous axiom: *"The Eyes observe only as the Mind perceives."*

Application and Use of The Science

The value of a science, to the world, is in proportion to its beneficial productivity to the human race, directly or indirectly, and this science of Humanology becomes of paramount importance and benefit, as it applies directly to the human race, old and young, male and female alike. It is in itself a key to the abilities, talents and productiveness of human beings, and a guide in directing them over the right course to pursue in developing these talents to the utmost. The saving of years of experiment, that sometimes wastes the life of a person; leaving helplessness, and dependency upon others, in old age, for an actual existence; with nothing more consoling to look back over than a misspent life, in a wrong direction; and with a sub-conscious soul still yearning for something it has never been able to achieve.

It is valuable in the training of little children, as they can be typified as regards the Division of Natures or the Combined Natures that they come under; and this can be accomplished very early in life, with a remarkable degree of accuracy.

For the teacher in regarding the traits and natures of the pupils in school, also their talents and capabilities.

For the lawyer in the study of his clients, judge, jury or opposing attorney and witnesses.

For the employer in selecting employees, and the employee in reading the nature of an employer and his temperament.

For actors in understanding and imitating characters.

For artists and authors in portraying human nature.

For salesmen in dealing with customers, and in meeting strangers.

For clergymen in understanding their parishioners.

For the parents in rearing their family, and correctly educating them. A guide to the formation of character.

Valuable in the army for the classification of men and officers.

It assists in choice of companions, professional men, partners, and others with whom we would associate, or enter into business, or whom we might employ.

By this science you can judge the integrity of commercial associates and any other persons with whom you come in contact.

It is pertinent to the physician to enable him to determine the temperament of his patients, and the idiosyncracies of the Natures to which they belong.

It is a wonderful aid in matrimonial selection, that both husband and wife will be of reciprocative temperaments and have many likes and tendencies in common that produce contentment in the home; companionship, encouragement, and *Happiness.*

CHAPTER II.

PHRENOLOGY

What a piece of work is man! how noble in reason! how infinite in faculties!—Shakespeare.

The Human Brain, the Spirit and the Mind

The greatest creations given by God, to the human being.

The Human Brain, an intricate and delicate bed of mental phenomena; the *Spirit,* the soul or the immortal non-earthly principle of humanity, mysterious and wonderful; the power behind the throne. The *Mind,* a product of the spiritual and physical contact, a mental process, influenced in many and divers ways; an abstract energy that obtains from the great mental phenomena.

A SUPERIOR MIND is the jewel of life; unequaled by wealth, or any other earthly possession; for it is with the mind that we make our lives, gain the necessities of our bodies, comfort, health; and moreover that most valuable of all acquisitions—*Happiness.* The mind can rob us of all these benefits or provide us with them. Guard, thou, well the mind!

THE BRAIN:—Technically the brain is called the Encephalon, and its many areas of control are mentioned as encephalic centers. Humanology embraces the study of brain anatomy as well as mental phenomena. Let us now look into this most remarkable of all human organs, the brain. It is the largest and most complex mass of nervous tissue in the body, and lives in the cavity formed by the bones of the cranium; it is covered by three membranes (Plate 5 Figs. 24 and 25).

STRUCTURE OF THE BRAIN:—The entire brain appears to consist of a number of isolated masses of gray matter—both large and small—connected together with a multitude of medullated fibres arranged in perplexing intricacy; however a general arrangement may be recognized. The numerous masses of gray matter in the interior of the brain may be looked upon as forming a more or less contin-

uous column, and as forming the core of the central nervous system; while around it are built up the great mass of the cerebrum and the smaller mass of the cerebellum. The central core is connected by various bundles of fibres with the spinal cord; It is also connected at the upper end, by numberless fibres, to the gray matter on the surface of the cerebrum.

DIVISIONS OF THE BRAIN:—The brain is divided into four principal parts, the CEREBRUM, the CEREBELLUM, the PONS VAROLII and the MEDULLA OBLONGATA.

THE MEDULLA OBLONGATA is the spinal bulb that is continuous with the spinal cord. All impressions passing between the brain and the spinal cord must be transmitted through the medulla; the function of conduction is a very important one. The medulla being the seat of such important centers as those controlling respiration and the heart's action. The student will readily appreciate that if the medulla be seriously injured death would result. (Plate 5—Fig. 25—A.).

THE CEREBRUM or large brain (Plate 5, Fig. 25, P and R) is the largest portion of the brain. It is egg-shaped, or oval and fills the entire upper skull. The surface, both upper and under, is composed of layers of gray matter, and is called the cortex, because like the bark of a tree, it is on the outside. The bulk of the white matter, in the interior of the cerebrum, consists of minute fibres running in three principal directions—1—From above downward; 2—from the front backward; 3—from side to side. The fibres link the different parts of the brain together, and connect the brain with the spinal cord.

In early life the cortex of the cerebrum is comparatively smooth, but as time passes and the brain develops, the surface becomes covered with depressions which vary in depth. The deeper depressions are called *fissures*, the more shallow ones *sulci* and the ridges between the sulci are called *convolutions*. The fissures and sulci are infoldings of gray matter, consequently the more numerous and

deeper they are, the greater is the amount of gray matter. The number and depth of these fissures and sulci is thought to bear a close relationship to intellectual power; babies and imbeciles have few and shallow folds, while the brains of men of intellect are always markedly convoluted. There are five important fissures which are always present; suffice it to state that the great longitudinal fissure divides the cerebrum into two hemispheres, and the transverse fissure divides the cerebrum from the cerebellum. The three remaining fissures, Parieto—Occipital fissure; Fissure of Sylvius and Fissure of Rolando or Central, divide each hemisphere into five lobes. (Plate 6—Fig. 5).

LOBES OF THE CEREBRUM—The lobes, with one exception, are named from the bones of the cranium, under which they lie, and are as follows—FRONTAL LOBE—PARIETAL LOBE—TEMPORAL LOBE—OCCIPITAL LOBE and CENTRAL LOBE or Island of Reil (Plate 6, Fig. 5).

The nerve centers which govern all our mental activities and the co-ordination of movements are centered in the cerebrum. These centers are the seat of reason, intelligence, will power, memory and all the higher emotions and feelings.

LOCALIZATION OF BRAIN FUNCTION—As a result of numerous experiments on animals, and close observation of individuals suffering from cerebral diseases or wounds, physiological science has made it possible to localize certain areas in the brain which control motor and sensory activity; it has also become possible to gain some knowledge of the districts in the cerebrum which are concerned with the higher mental activities.

NAMES OF ANATOMICAL AREAS—The portion of the cerebrum governing muscular movement is known as the *Motor Areas;* the portions in control of sensations as the *Sensory Areas* and those connected with the higher faculties, such as reason, and will-power, as *Association Areas.*

MOTOR AREAS—The surface of the brain assigned to the function of motion is the posterior portion of the frontal lobe, or the gray matter situated in front of the fissure of Rolando. The movements of various parts of the body are controlled by nerves arising in this area, and the special portions of the area in which the nerves serving the different parts spring forth, can be studied in (Plate 6, Fig. 5).

DECUSSATION OF NERVES—The nerves extending from the brain into the spinal cord and those approaching the brain through the cord, decussate or cross in the Medulla Oblongata. For this very surprising reason the nerves arising in the *right* side of the brain govern the movements of the *left* side of the body, and vice versa.

In many cases of paralysis or convulsions, it becomes possible to locate the *exact* portion of the brain that is affected, by close observation of the loss of function.

SENSORY AREAS—The sense areas are the parts of the brain responsible for the function of sensations, controlling the senses of Hearing, Taste, Smell, Vision and Touch. The visual area is situated in the posterior district of the occipital lobe; the auditory area in the upper district of the temporal lobe; and the taste and smell areas are in the anterior part of the temporal lobe (Plate 6, Fig. 5).

SPEECH AREAS—There are, in the cerebral cortex, four petit areas (Plate 6, Fig. 5), known as speech centers. They do not develop simultaneously in both sides of the brain. In right handed persons they become fully developed in the left side; and for left handed persons in the right side. If these centers are injured it results in some destruction of the ability to speak, or understand either written or spoken words; this is called *aphasia.* These centers are accessory memory areas as aphasia is due to loss of memory, either of words, or the meaning of words seen or heard, or of the formation of letters. How these areas control memory is not known. Language is memory pictures of the form of letters and appearance of words, or of the mental realization of their sounds, and manner of express-

ing or enunciating them. These memory pictures are closely related to each other by association fibres passing between their centers.

ASSOCIATION AREAS OF MYSTERY—The Motor and Sense areas, previously analyzed are, figuratively, small islands, which are surrounded on all sides by cerebral tissue in which definite functions have not been ascertained. These mystery spaces are designated as Association Areas, and are supposed to provide the process of function for the millions of mental activities. The various sensory impressions are here moulded into complex perceptions and brought into co-ordination with the motor organs. The cerebrum is the seat of associations which make up our psychic life; without it the mind would be unable to command any conscious exercise of Will Power, and all memory and co-ordination of thought and action would be destroyed.

PONS VAROLII.—The bridge of Varolius, or Pons Varolii, lies in front of the upper part of the Medulla Oblongata. It is composed of a net work of white nerve fibres inter-mixed with gray matter. The transverse fibres serve to join the two halves of the cerebellum. The longitudinal fibres join the medulla with the cerebrum, (Plate 5, Fig. 25-5).

THE CEREBELLUM, or little brain of co-ordination, is lodged in the lower back area of the skull and overhanging the Medulla Oblongata, (Plate 5, Fig. 25-W). It is rather flat and oblong and about 3½"x2½" inches in size; divided into a medial segment called the vermis and two lateral lobes or hemispheres, each lobe sub-divided by fissures into smaller portions. The surface consists of gray matter, traversed by numerous furrows, of varying depth. The interior consists of white matter.

The cerebellum is connected with the cerebro-spinal system by white nerve fibres, called *Peduncles*. They are arranged in three pairs, the frontal upper pair, pass forward and enter the cerebrum. The lower back pair pass down to the Medulla Oblongata. The middle pair pass into

and make up the larger portion of the Pons Varolii, thus serving as a means of communication between the two halves of the cerebrum; hence, we discover that the cerebrum has intercourse with the entire cerebro-spinal system.

FUNCTIONS OF THE CEREBELLUM.—Co-ordination is now observed as the principal function of the cerebellum. This has mainly to do with ordinary movements and the maintenance of equilibrium; while a portion of the middle ear has also an influence over equilibrium. Destruction of the cerebellum does not destroy the sensory nerves or the intellect, but while motion itself is not subverted, co-ordination is so impaired as to interfere with adapting movements of one part of the body to other parts.

Pigeons, after removal of the cerebellum, can fly if thrown from a roof; but co-ordination is lost and they proceed to turn somersaults in the air and eventually fall to the ground.

THE TENETS

The Spirit, Soul, Immortal part or Spiritual Principle, of the human being, is absolutely and definitely separate and distinct from the brain. The Spirit can be likened to the captain of a huge vessel at sea, who by means of the rudder and direct communication with all forces of navigability possessed, can pilot the ship through both calm and rough seas. The Brain can be likened to the mechanical centers of control, of the navigation forces, through which the captain's orders are put into execution; and the engines, rudder, pumps, and motors can be likened to the Organs of the body. There is another important principle, *the Mind*, which will be discussed later.

Normally the Brain is the servant of the Spirit, and the body the servant of the Mind; this developes and evolves strength of will power, reason, judgment and wisdom; and builds the Mental Natures. It so happens, however, that animal tendencies oftimes over-balance the normal condition; the Brain becomes ineffective in carrying out certain orders of the Spirit and as a consequence pro-

duces a weak mind with which dissipation, over indulgence, and sensuality reign, instead of reason and will power. This creates the Physical Nature.

"Self preservation is the first law of Nature," therefore, any contrary evidences displayed, foretell ignorance, and this bespeaks low mentality. Inferior mental equipment makes it impossible for the spirit to judiciously direct the acts of the body.—A striking example of what impaired brain efficiency can produce, was observed by the author in a medical clinic for the insane, while a student at the University of Pennsylvania, Philadelphia, in 1909. THE SUBJECT,—A man of forty-five years. HISTORY,—successful broker and business man; accumulated fortune, overtaken by physical illness; during which period he made bad investments and lost fortune. RESULT,—mental collapse, insanity and determination upon self-destruction. PHYSIOGNOMY,—The features of this pitiful, miserable subject bore direct evidence of previous intellectuality of a high calibre; while his physical structure signified weakness and lack of vitality. HYPOTHESIS,—High mentality over strained, with insufficient physical power to support the nervous reflexes. RESULT,—Brain drained of the energy to function and left in a state of weakness and immobility of association areas. TENET,—It is quite evident that the spirit of this man did not *will* that the brain, the great creation given to it by God and through which it must seek expression and perception, should be *destroyed,* and made incapable of accomplishing these most puissant duties; therefore we may realize both the delicate, complex and wonderful machine, that the brain really is, and how *distinct,* it becomes from the Spirit, Mind, Soul, or the Immortal Principle of humanity.

THE SPIRIT:—The *mysterious, God-given principle,* non-earthly, invisible; without size or weight or substance; known to exist, in or about us, but nowhere to be found. Of the spirit, we know but one thing, *its work.* Just as the powerful streak of lightning dashes and crashes through the heavens, coming apparently from nowhere, and

seemingly, returning there, the spirit that dwells, we know not where, expresses its presence just as apparently as the lightning; but goes about its great work with care and caution, if given efficient organs to work with. God makes and creates the Spirit, while the body grows as an animal upon this earth; the body, therefore, may be imperfect, as it is the product of the world but the spirits of all of us are perfect and the insane, imbecile, possesses just as much perfection of spirit and soul as do the sane; but proper expression is made impossible, through inferiority or disease of the animal structure.

THE MIND:—Former writers have classified the Mind as synonymous with the Spirit or Soul and many theories have been advanced by phrenologists in an effort to substantiate this version; however, years of contemplation failed to prove a logical condition extant in this hypothesis. We unanimously agree that the Spirit, Soul or Immortal Non-earthly Principle of mankind is of divine creation; therefore, the spirit is *perfect,* as God would not create an imperfect principle. We must then admit that the Spirit of the criminal and of the degenerate is just as perfect as those of the moralist and cultured gentleman; hence, we arrive at the acme of the psychological complexity. If the Spirit is perfect then why can the Mind be imperfect and base; even when possessed of shrewd faculties.

The author's tenet follows,—

1—SUBJECT:—The Human Mind and its relationship to the Spirit and also to the Human Brain.

2—QUESTION:—What creates the Mind and why is it so individual?

3—ANSWER:—The mind is the *result* of the *phenomenon* caused by the *contact of the Spiritual Influence and the Brain.*

4—HYPOTHESIS:—The brains of individuals have many distinctions, especially in size, shape, convolutions, proportions, and quantity of gray matter; besides, thousands of other minor differences, too numerous to mention. The spirit must seek expression through the brain, even

while the organ grows and develops; also in any state of health or disease, at any and all times; therefore, the brain condition not always being perfect, in fact seldom if ever perfect, affords the spirit only certain influential contact and it is *the result of this contact that creates the Mind* and stirs up mental activity within the Brain; for the Mind is in the Brain, while the Spiritual Influence may be even *beyond* the confines of the human body.

From the above hypothesis, is it not logical to assume that the great variety of brain structures observed in people; together with varying degrees of perfection of these great mental organs, form the direct cause for the many untold differences in human minds, personalities, temperaments, will powers and natures in general?

Is it not also feasable to contribute the ever-changing physical condition of the Brain and the corresponding phenomena of the Spiritual Contact with it, as the chief factors that cause the changes in Mind and Temperament in any individual? The more perfect brains produce the greatest mental efficiency which leads to memory, reason, judgment and wisdom; while the more imperfect brains develop the least mental efficiency and therefore lead to imbecility, crime or degeneracy.

Are persons with imperfect brains lost to any influence of culture? The extremely imperfect or diseased brain of the imbecile is not responsive to reason or culture; however, advancing degrees of perfection of the brain admit of greater possibility of enlightenment and development; even to the extent that many brains, such as the kind possessed by shrewd criminals, are powerful in many classes of planning, scheming and contriving; even rivaling at times, the more perfect brain. This condition is due to an unique development of the particular districts of the brain used for these purposes; but presages, under-development of other important encephalic centers of reason, judgment and wisdom.

The brain may be developed and moulded through education and the influence of the minds of other human be-

ings, aside from the ever attending spiritual influence; until after years of persevering, a weak, imperfect brain can sometimes be strengthened and developed into a much higher grade organ; more responsive to the Spiritual Influence, and therefore power of mind; conversely, a brain of high perfection may through over strain, bad influence, disease or misfortune be weakened to the degree of non-responsiveness to the Spiritual Influence and therefore inferiority of Mind; which may cause degeneracy, criminality, or even imbecility.

It has been satisfactorily demonstrated by diseases of the brain, that mental phenomenon takes place in the gray matter of the brain; the cells of which, numbering into the millions, record impressions of everything in the life, experience and general education of the human being. Distinct classes of these cells have correlation with the various sensations of feelings experienced in daily life, and the different classes of cells communicate through the labyrinth of nerve fibres with all parts of the body. Usually expansion or contraction of the muscles, especially facial, is the result of most sensations; and this gives to the personality that tell-tale "key" called *Expression.* The eyes, mouth and facial muscles are more delicately responsive to sensation and emotions than any other features; hence, we have the reason for the oft-repeated statement "He could not look me in the eyes."

ILLUSTRATION OF THE SPIRIT, MIND AND BRAIN.—The *Spirit,* for example, may be likened to the Sun, its rays of light falling upon the earth and warming the millions of atoms of ground in a flower bed. The Soil in the flower bed may be likened to the *Brain,* and the nourishment stored up in these millions of atoms, of ground, warmed by contact with the sun's rays, give forth energy that is absorbed by the flower seeds planted therein. The flower seeds eventually open and grow, through the continued phenomena of the contact of the sun's rays and the ground, finally developing into a flower. The Flower

can be likened to the *Mind*, as it is the result of the phenomenon.

If the Soil, which we liken to the Brain, is lacking in the essential chemicals to give proper nourishment, then the Sun, which is likened to the *Spirit*, cannot co-operate so effectually to produce efficient results, and the Flowers, that compare with the *Mind*, would be dwarfed, frail, weak and perhaps would resemble weeds more than flowers; hence, the richer the soil, under the influence of the Sun, the better product will spring from the seeds, which can be compared to knowledge; likewise, the more perfect the brain, under the influence of the Spirit, the higher standard of *Mind* will result from the phenomenon.

GROWTH, SIZE AND PROPORTIONS OF THE BRAIN:—The brain previous to birth, is not covered with a bony shell, but protected by a cartilaginous substance; after birth this gradually hardens and forms the cranium. During this growth the brain is developing and assuming more definite proportions; while the cranium takes such form as becomes necessary to accommodate the brain; thus, we observe that *the brain designs its dwelling place*, and eventually this ultimate shape determines the kind of nature that is predestined. The brain in infancy is somewhat different in configuration than in maturity as it requires knowledge and experience to develop certain districts, nevertheless, *every child is born with a predestination toward the shape of brain and cranium that will finally predominate.*—As the Spiritual Influence is exercised over the brain, which creates the Mind, the normal brain through exercise of its functions, steadily develops for many years; reaching the maximum power between forty and fifty years of age. This blossom of mentality should flourish and bloom until about sixty years of age, when waning vitality begins to sap the brain of its energy and slowly diminish the mental efficiency. Continued exercise of the brain prolongs mental activity of the higher order; hence, brain workers oftimes maintain remarkable efficiency even into late years of life. Weak faculties are natur-

ally the first to become affected by old age; the stronger ones remaining fairly efficient until the end.

The brain is the most individual and distinctive part of the human body, and its definite size and shape determine the powers of intellect possessed; while development is cultivated by use, and mental application, it is impossible to alter or rebuild the poorly formed, undersized encephalon into a large sized well proportioned organ; therefore, the inferior brain cannot be transformed into that of a genius, as training and culture fail to accomplish it.

The Following traits apply to brains, as to SHAPE, SIZE, QUALITY, IMAGERY.

SHAPE:—The proportions as to length, breath and height must be carefully observed to determine wherein the greater development obtains. The head should be viewed from all angles, also each anterior, posterior and lateral district studied in comparison with surrounding areas. (Plate 6, Figs. 1, 2, 3, 4, 5).

Viewed Anteriorly, the high, broad cranium denotes memory and reason. If low and narrow, both memory and reason are poor. If high and narrow, memory is pronounced, while reason is mediocre; if low and broad, memory is poor and reason fair.

Viewed Laterally, front to back, the cranium may be high and short, denoting good memory and reason, or low and long, expressing poor memory and deficient judgment, or low and short, implying lack of both memory and reason.

Anterior, Lateral and Posterior views must be made, and correlatively considered, weighing one indication against another, before arriving at a conclusion; as a pronounced trait from one angle of observation may be modified from another.

SIZE:—The brain of high intellectuality must possess a well proportioned quantity of gray matter, without which the encephalon is weak and inefficient, even to the extent of imbecility. All proportions of the organ must be considered, when making analysis; as the size in direct perimeter

or circumference does not wholly determine the mental powers. The breadth, length, and height must be carefully observed, as the brain may be large in circumference but poorly proportioned as to other dimensions. The long and narrow, short and broad or low encephalon is not possessed of the general strength of mentality found in the full, well-formed organ.

At birth the male head is approximately 12½ to 13¼ inches in circumference. One year of age it becomes about 16¾ to 17¼ inches; at five years of age, about 18¾ to 19¼ inches, at ten years 20 to 21½ inches; fifteen years 20¾ to 21¼ inches; at twenty years of age 21¾ to 22¼ iches; while 22⅞ to 23⅛ inches is a large mature head and 23⅞ to 24⅛ is extreme. In some very unusual cases the male head has acquired the circumference of twenty-five inches; this is abnormal and signifies dull, inactive if not unsound mental qualities.

Only a very small percentage of Caucasian male heads attain over twenty-three inches in circumference, while twenty-two is about the average for the Anglo-Saxons.

QUALITY:—Size and shape foretell a great deal concerning the mental powers; however, another important condition enters the analysis; this consideration is *quality*. The brain may have a sufficient quantity of gray matter, and be of inferior capabilities owing to inactivity, drowsiness, and lethargy, caused by lack of vitality and energy of physical strength, the result of disease or dissipation. Oftimes, a brain of limited quantity and unfortunate shape may be of good quality; if supported by exceptional vitality and energy.

The internal indication of the brain of quality is by the density of its convolutions, and this is usually reflected externally by refined and clear cut features. The powerful brain possessed by great inventors, and scientists, must be large, well proportioned and of good quality.

Cultivation of acts and speech betoken the brain of quality; also expressions of the eyes, temperament and

clearness of perception. Small bones, fine hair and texture of skin bespeak refinement that reflects on the brain.

IMAGERY:—The imagination and memory indicates quality of brain. Individuals show startling differences in the kind and vividness of imagery. Cases are on record where the mental life is almost entirely in visual and auditory or motor terms. For example, one student can learn a foreign language by hearing it spoken and retaining the sound realizations; another must write out every word and sentence; while still another can memorize from the type written page and recall the words with an almost photographic vividness.

The history of literature and aesthetic art provides many interesting illustrations of remarkable powers of visualization. Blake and Fromentin were able to produce, in pictures, scenes long retained in memory. The latter recognized that his painting was not an exact reproduction of what he had seen, but that it was none the less artistic, because of the personal influence his mind had exerted on the memory image. Wordsworth, oftimes, postponed description of a scene that appealed to his poetic fancy, with designed purpose to dim the outlines, but enhancing his personal interpretation and perception, and thereby adding that individual note, *personality*, to his work.

Goethe had the mental retentiveness to call to mind at will, the form of a flower, and the imagery to make it change from one color to another and to unfold and bloom, before his mind's eye.

The study of sensory elements of consciousness, motor tactile, visual, auditory, thermal, internal, alfactory and gustatory processes, pursued for the last half century, would seem to give promise of a clue to imagination. However, simply the visual image, or mental picture, is still popularly accepted as characteristic of the imaginative phenomenon. In fact, William James, the distinguished psychologist, devotes the whole of his interesting chapter on the imagination to the discussion of different *types* of imagery. The sensory elements of consciousness are in-

volved, however, in perception, memory, reason, sentiment, and volition as they are in imagination. They have been recognized as fundamental from antiquity. Nothing is in the intellect which was not previously in the senses. To be out of one's sense is to lack the brilliant guidance of the intelligence.

MISCELLANEOUS:—Humanology, the science of natures and the philosophy of mental phenomenon has been greatly indebted to physiologists and to students of medicine in general. Any attempt to classify the names of those who have approached the study of the mind from the field of the natural sciences is likely to be imperfect and entail omissions.

The following, however, serve to substantiate the richness of the contributions of the natural sciences to the mental science and Humanology.—Gall, Müller, Locke, Cheseller, Cabanis, Young, Bell, Goltz, Hering, Wundt, James, Flechsig, Kreapelin, Clouston, Galton, Munk, Carpenter, Hemhaltz, DuBois, Reymond, Maudsley, Janet, Darwin, Latze, Mosso, Ferrier.

Physiology would be incomplete without it took cognizance of the functions of the sense organs, of the sensory and motor nerves, of metal phenomenon and the association areas of the brain, as well as the expression of emotions, and the Spirit, or psychic agent; likewise, mental science would be without depth, to omit physiological observation, and anatomical study.

Large and small brains are usually disproportionate to their bodies. The larger encephalon (Plate F) accompanying the slight physique, while the small organ is associated with the large physique, (Plate A). This common condition affords very favorable observation in the isolation and segregation of the Physical, Muscular and Mental Natures.

A perfect brain, which is seldom if ever found, can be signified from the following conditions. It must be superior in 1st. Shape and Proportions—2nd, Size and Quantity—3rd, Quality and Activity—4th, Imagery and Memory. Let

us assume that the four conditions total a maximum of one hundred per cent; twenty-five per cent being allowed to each acquisition; then, the degree of intellectuality may be estimated by determining or approximating values not to exceed twenty-five points to each condition, and taking a sum total of these amounts.

The various encephalic centers of the brain may be likened to a river governed in its course by the banks or shores; occasionally floods occur that send the currents streaming over into other directions, and this turmoil can be compared with actions of mind contrary to the natural indicated character and tendencies of an individual. Occurrances of a certain nature excite a particular encephalic center, or district of the brain; the stronger controlling faculties, or higher developed areas being most frequently excited to energy; while the less developed centers are not so active and responsive.

Through use and application certain centers become strengthened and developed, while others that are not frequently brought into action remain or grow weak; just as the muscular system is affected by exercise or lack of it. It is natural for persons to use their stronger faculties, while more effort and therefore reticence is demonstrated in bringing the weaker ones into play. *This gives the foundation for natures.* One who is by nature serious hesitates to attempt wit and humor, and another who is not given to aggression dislikes and avoids pugnacity. Humanology classifies human nature into six distinct divisions, and contemplates each nature separately.

CHAPTER III.

Districts of The Brain From Humanology Chart

A further classification of the functions of *districts* of the brain, has been made by the author, as illustrated on Humanology Chart (Plate 6, *Frontispiece*). The student will note the different divisions, and afterwards study the following Phrenological analysis.

In the early study of Phrenology, the cranial subdivisions were supposed to be very minute and therefore complicated. It was owing to the attempt to locate the districts of all traits that serious contradiction developed throughout the entire reasoning.

The old charts made by pioneer students, such as Spurzheim and Gall, that later met further development by Broussais, Combe and others, were given over due consideration and accepted as practically standard theories, by later students; much to the sacrifice of the constructive building of the science.

Many traits are found to exist in the same districts, running relatively or homogeneously throughout given areas; thereby, making it impossible, in some cases, to set aside any minute point, or location on the brain that directly bears upon a single trait.

To avoid this erroneous and complicated method of phrenologic reasoning, the Humanology chart is designed as a more generalized system of divisional analysis; readily perceivable and fundamentally correct.

The cranium is shown, (Plate 6, Fig. 1, 2, 3, 4) in the following subdivisions or districts: 1—ANTERIOR LOWER—2—ANTERIOR CENTRAL—3—ANTERIOR UPPER — 4 — CENTRAL UPPER — 5 — POSTERIOR UPPER—6—POSTERIOR CENTRAL—7—POSTERIOR LOWER—8—ANTERIOR LATERAL—9—CENTRAL LATERAL—10—POSTERIOR LATERAL.

The above enumerated districts are sufficient to designate all important brain centers and functions; also to

form a basis for the study of Phrenology. *The traits of a district are pronounced only when the district is full and prominent, otherwise the functions are weak and adverse.*

The first consideration that confronts the student is to carefully observe the head of a subject and to determine which districts are fully rounded out or well developed as to prominence; also the ones which are flat, depressed or lacking in prominence and development; always keeping in mind that the brain lies *underneath* and takes relative form to the cranial profiles.

1st.—ANTERIOR LOWER DISTRICT:—Directly over the eyes and comprising the "Superciliary Ridge" and the "Frontal Sinus Ridge" is the portion of the brain that is given to Perception, Form, Size, Weight, Color, Locality, Number, Individuality, Assertiveness, Energy, Self-reliance, Executive, Initiative, Creative and Constructive traits. Therefore if this district is full and prominent the above traits are possessed; but if of poor development the reverse traits obtain.

The outstanding general functions of this district can be summed up as—Power of *Perception* and *Discrimination* all pertaining to *Reason.*

When prominent, it bespeaks the Mental Nature; if of inferior development, combined with low forehead, the Physical and Muscular Natures are signified.

2nd—THE ANTERIOR CENTRAL DISTRICT:—Or Central forehead, pertains to Judgment, Comparison, Eventuality, Time, Wit, Mirthfulness and Causality, or the faculty of tracing effects to their causes.

The chief functions being *Comparison* and *Mirth* and *Judgment.*

When large and prominent it implies the Mental Natures, and when low and flat the Muscular Natures.

3nd—THE ANTERIOR UPPER DISTRICT:—Is the seat of memory, and the tendency for absorbing knowledge, and all traits that are relative to memory; such as literary, musical, art and details. Pronounced memory is indicated if the top of the cranium rises to a blunt ridge

extending over the Central Upper District; together with high forehead.

The well developed Anterior upper District also signifies Reliability, High Ideals, Conscientiousness, Sympathy, Imitation, (acting); Benevolence, Agreeableness and Studious traits.

It is the Mental Natures, but when under developed the Muscular Natures obtain.

The chief functions are *Memory* and *Benevolence.*

If of inferior development reverse traits obtain, and the Muscular Nature.

The extremely high forehead usually accompanies the narrow cranium; which indicates indifferent reasoning powers; therefore, a medium development of this district and prominence of the Central Lateral District betokens good power of Reason.

4th—CENTRAL UPPER DISTRICT:—Pertains to Hope, Veneration, Optimism, Respect. The amiable, genteel and kindly disposition. If extremely prominent, awe and meekness are indicated.

The leading functions are *Hope and Veneration.*

5th—POSTERIOR UPPER DISTRICT:—Prominence here oftimes appears like a "bump", and Self-Conceit, Unreasonable, Biased views, Narrow Mindedness, Obstinacy, Love of Approbation and Selfishness are implied.

When the Central Upper District is undeveloped the Posterior Upper District is usually prominent; which is a natural coincident, as both districts being extremely antithetical are rarely of equal prominence.

The growth of the brain being influenced by the traits of either one or the other of these districts presses upward on the cranium and causes the characteristic accentuation in profile.

The pronounced functions are: *Self-Conceit and Firmness.*

If prominent the Muscular Natures are denoted, and if medium the Mental Natures.

6th—POSTERIOR CENTRAL DISTRICT:—This is the region of Inhabitiveness, or love of home, and propensity to live in the same place always, and maintain old customs and manners; Adhesiveness, Concentrativeness, and Continuity. Prominence of this district betokens the old-fashioned nature, non-progressive, reliable and contented.

The main functions are *Inhabitiveness* and *Continuity*.

It is of the Muscular Natures when prominent and of the Mental Natures when flat.

7th—POSTERIOR LOWER DISTRICT:—This is the cerebellum district of muscular signification, equilibration and co-ordination. When prominent it foretells amativeness, or love. Philoprogenitiveness or love of offspring or fondness for children; combativeness, assertiveness and willfulness. The forceful dominating personality; and denotes the Muscular Natures.

The pronounced functions are *Amativeness* and *Assertiveness*.

When under-developed the reverse traits are implied and the Mental Natures.

8th—ANTERIOR LATERAL DISTRICT:—The great seat of Concentrativeness, Constructiveness, Oratory, Ideality and Reason. If prominent the creative mind of analytical and synthetical ability; productive of ideas; and clear imagery is denoted. This development is usually contrary to memory as both the full, high forehead and prominence of district No. 8 rarely obtain. Usually memory detracts from reason and vice versa; therefore, this characteristic condition is evident in a comparison of districts 3 and 4.

The reasoning brain is the factory of ideas; while the memorizing brain is a storehouse of knowledge. Ideas come from initiative mental phenomena; while knowledge is absorbed through perceptive phenomena. The inventors, architects, scientists, composers, artists, and designers, in any field of creation or constructiveness, require the reasoning brain, and therefore, the prominent Anterior Lateral District betokens such ability.

When disticts Nos. 1 and 8 are both prominent, pronounced reasoning power is established; and if combined with a fairly high forehead, the acme of *mental strength* is signified.

Reasoning ability leads to shrewdness, logic, caution, originality; system, method, broad mental vision, executive ability, leadership and practicality.

The predominate functions of this district are *Reason —Oratory* and *Imagery.*

If prominent the the Mental Natures are signified, otherwise, the Muscular Natures prevail.

9th—CENTRAL LATERAL DISTRICT:—Alimentiveness or love for food. Secretiveness, destructiveness and acquisitiveness, or a propensity for the accumulation of wealth and worldly goods are traits of this district, and when well developed and prominent, courage, muscular power, willfulness, perseverance and determination are implied.

The salient functions are *Alimentiveness* and *acquisitiveness.*

The Physical Nature is signified, combined with the Muscular Mental Nature.

10th—POSTERIOR LATERAL DISTRICT:—The center of combativeness, aggressiveness, vitativeness or having vital force, and animation. The power center of the brain that gives efficiency to efforts; the storage district of muscular energy.

The leading function is *Vitativeness.*

It is of the Muscular Nature when full and prominent and of the Mental Natures when under-developed. When this district is small and inferior, the ears are located nearer to the back of the head; indicating lack of muscular strength, but a large mental brain.

PHRENOLOGICAL ANALYSIS:—It is important that the student should use the relative proportions of districts as a comparison by which to weigh one pronounced

trait with another, or with one of inferior development; and ascertain wherein all the weak and strong points of a nature lie, and how they sum up as to general inclinations and tendencies. This will be more readily appreciated after a thorough study of "The Six Pure Natures", and furthermore when the sub-sciences of Physiognomy and Pathognomy have been studied.

Phrenology makes it possible to determine a trait in one particular manner, by means of brain development. *Physiognomy* goes a step further and affords the possibility of determining a trait through the features and general profiles. The science of *The Human Scale* or Six Pure Natures, combines the above analyses and reveals the basic temperament and nature that certain special traits produce; while *Pathognomy* gives warning, of the moment, as to the state of mind the subject is in.

All of these sub-sciences eventuate to form a thorough system of comprehensive observation; comprising the field of Humanology.

CHAPTER IV.

ANTHROPOLOGY

The doctrine of the structure of the human body—Webster.

The Human Scale

The Six Divisions of Human Nature.

The first isolation and segregation of human natures into six distinct and separate classes is propounded in the science of Humanology. Mental phenomena caused by the Spiritual Principle and the Brain produces the Mind, or the intellect. The power of mind influences human nature, moulds the will power and builds character, temperament and intellectual capacity.

The mind is dependent upon the calibre of brain it has to work with, for its efficiency. This individual complexity evolves certain distinct and personal attributes that combine to produce specific classes of human nature.

The more perfect the brain, the higher mentality is possessed and through this acquisition, certain tendencies of thoughts, principles, traits, moods, eccentricities, idiosyncracies, temperament or disposition must be possessed; and therefore, the nature is defined, stamped, and placed in evidence for the human eye to observe and analyze.

Many degrees of variations obtain with different classes of brains, and it becomes necessary for practical and comprehensive analysis, to isolate, segregate, or classify the natures into separate fields of observation; so that a more specialized manner of study may be accomplished. Heretofore, individual features through the sub-science of Physiognomy have been largely accepted, in general readings or human analysis, apart from the field of nature to which they belong; and in contravention to certain natural tendencies of human natures; that should be considered in their logical field and surveyed by means of specialized observation, as units of a great whole.

People of a certain nature or combinations of two or more natures are influenced, along definite lines of

thought and action, according to the tendencies of the natures; and oftimes certain features, possessed cannot be correctly interpreted without pre-knowledge of the nature under analysis.

The fruits of human analyses are found in the intelligent interpretation of Natures. The most essential knowledge for one to obtain is a thorough understanding of yourself; and thereafter, to readily read and analyze friends, acquaintances and strangers in social, business or professional life. The more systematic method employed gives the quickest, surest, most efficient and dependable results.

The following extracts from an introductory lecture, delivered to The Society of Psychomachy and Biological Research, by the author, will serve to introduce the general isolation of the Six Human Natures.

Extracts from an Introductory Lecture on Humanology

Giving a brief resume of the Six Divisions of Human Nature, and uses of the science.

"I am mindful of the fact that you have come here with a desire to learn something more of the new science, that I have named Humanology. It has required years of profound research and experiment, in the final summing up of which, I was enabled to arrive at the exactness of facts that, for a long time past, even through all our civilization, seemed uncertain as to the reality and meaning. A comprehensive subject that cannot be more than introduced to you in one sitting, and if successful in doing that much today, I will be quite satisfied with my efforts."

"Humanology is founded upon the analogy of the biological structure of the human body and that of the Mind, Spirit, Soul or in other words the Immortal part of the human being that presents itself through the great agency of the Brain. I consider, in this respect, some of the anatomy more closely than other parts, from the fact that certain features and their controlling muscles are used to a much greater extent to do certain bidding; and therefore, are so formed and marked by use as to be of

exceptional value in portraying facts. Through reading the meaning of these facts, we can learn, from the features of people, what their traits, temperament, talents, characteristics, idiosyncrasies, eccentricities and their natures in general are. I find in analysis of the biological structure of the human body, that facial features are more indicative when considered conjointly with the size, shape and contour of other parts of the body; and all these considered, separately and collectively, with the supreme mental machine, *the Brain.* A ratio between the muscular system and the mental or cerebral system is approximated, *and upon this ratio between mental and muscular energy in a person* I have been enabled to divide the human race into six distinct and individual natures; each having special talents, traits, characteristics and temperaments."

"I will take up the six different natures, giving you a *brief, general outline* of the chief reasons for classifying them in this way; they are as follows: 1st, ULTRA PHYSICAL—2nd, PHYSICAL MUSCULAR—3rd, MUSCULAR MENTAL—4th, MENTAL MUSCULAR—5th, MENTAL AFFIRMATIVE—6th, ULTRA MENTAL. These different natures, in people, have their different uses in the life of the world, and you will find upon very careful observation that they do certain kinds and classes of work better than the people of other natures can do it. Unfortunately, however, it is not a general rule that people of a particular nature always find the occupations in the world that they are most fitted to pursue; and it is for this reason that so many failures take place. Young men and women decide upon a profession, after several years of close application to the many difficult branches of knowledge, that must be mastered before a degree is awarded; and then we find, from statistics, that only about ten per cent are successful practitioners. There is a very direct cause for this, and I have turned the light upon it. They were uncertain of their talents, could not read their own natures, selected the profession fancifully; this was the pitfall and it takes years of the long drawn out school of experience to finally teach

the great mistake. This also applies to those who learn the trades, and those who enter different kinds of business.

"THE FIRST NATURE—*Ultra Physical*:—Taking the features collectively, is a person having the balance between the physical power and the brain power predominately in favor of the physical power. An over development in most parts of the body of fat. The brain comparatively small; the bone structure apparently small in proportion to the bulk of the physique. The muscle structure undeveloped and sub-normal in relation to the body. A portly person, whose flesh is soft and flabby as well as the muscles. The bones are covered with excessive rolls of fat; giving rounded contours at all angles of the physique and dimpled impressions in the skin, in places; especially at joints and on hands and face. The feet and hands are often small in proportion to the other parts of the body. The forehead is low, ears set toward the front of the head, with low head height above the ears. Full neck with rolls of fat at the back. Features of large or medium size. Lips thick and loose; nose low in arch and spread out at base with large nostrils. Double chin, round face, projecting ears, expressionless eyes, and lack of expression in facial muscles, except upon intense excitement. Coarse hair and skin."

"THE SECOND NATURE—*Physical Muscular*:—Taking the features collectively, is a person having the balance between the muscular power and the brain power predominately in favor of muscular power; minus the ultra-physical conditions as to excessive fat. The bones will be quite large; the muscles firm, large and protruding; especially at arms, legs and back. The body shape angular, with square shoulders. The facial features large; skin usually dark and course. The body well developed and not weighted with superfluous fat. Good lung capacity; usually large nose and mouth. Lips comparatively thick; heavy eyebrows; hairy body. Physically powerful; slow but sure. It follows that one of this nature has great vitality. All structural parts of the body sturdy and well

built as to muscular development. The flesh firm, and the muscles when drawn up tense, demonstrate the power and strength possessed. The head rather low above the ears and the ears set forward toward the face. The cranium being larger at the back of the head than in front of or above the ears. Forehead low and usually wrinkled. Ears medium size."

"THE THIRD NATURE—*Muscular Mental:*—Taking the features collectively is a person having the balance of power, between the muscular and the brain, more evenly balanced than in either of the foregoing natures; giving each of these two great branches of power a more even control over the body. Having the muscular qualities of the Second Nature, but added to this is the brain power, the mind, intellect, or power of perception; and with this more even balance between brain power and energy and the muscular power and energy, a division of the total energy of the body obtains, and therefore lessens to an extent the size and power of the muscles and size of the bones. The muscular tendency is still expressed, which gives quickness of action, reason, and power of perception, as a result of the coalescence with the brain power. The head will be higher above the ears; forehead somewhat higher, ears set about three-fifths from front to back of head. Features comparatively smaller, lips somewhat thinner than either of the foregoing natures. Skin not so coarse and hair somewhat finer. Hands more graceful in shape and eyes beginning to show more depth of intensity and expression. The muscles of the face more expressive."

"THE FOURTH NATURE—*Mental Muscular:*—Taking the features collectively is a person having good balance between the muscular qualities and the brain qualities, but having the balance in favor of the brain power, not to an excess but enough to give the brain power some predominance. This is an influence over the entire body that causes a particular variety of features. The forehead will be still higher than in the third nature; the ears will be located more than half way toward the back of the head.

The eyes will be brighter and show deeper intensity of thought and the muscular qualities will be found to exist in a still lesser degree than in the third nature; however, there will be quite sufficient muscular power to support the demands of the brain in the production of mental work and also for physical labor. The nervous system will just begin to make itself known in this nature, but to no extreme degree as the balance between the mental and muscular is so well proportioned as to give a very excellent distribution of energy to all parts of the body; and sufficient vitality to with-stand the strain of life. This is the nature of great productive power; the nature best equipped for leadership. Lips will be of medium thickness; mouth at right angles to base of nose and on a straight line. Chin will be prominent; nose of medium size or larger and convex to more or less degree at ridge. Eyes set apart, about the width of an eye. Forehead broad across the front and well rounded out above the eyes. Hands and fingers well formed and quite perfect in outlines; the muscle at side of thumbs large and often protruding. Hair of a medium fineness and skin likewise. Eyebrows on a nearly straight line and at right angles to ridge of nose. Nose will occupy about one third of the frontal facial plane."

"THE FIFTH NATURE—*Mental Affirmative:*—Taking the features collectively is a person having the balance between the muscular qualities and the brain or mental qualities in favor of the brain power to a still greater extent than the fourth nature. As the balance of the brain power increases over the muscular power, I find that the nervous system becomes more active and we have a more sensitive person in every respect. The mind having greater domination over the body affirms its every desire and controls and subjugates the energy of the body for the fulfillment of these desires, and as the bone structure will be of less thickness and the muscles of a smaller size in comparison to the body and therefore weaker, than in any of the foregoing natures, it becomes quite possible for the nervous system to be overtaxed and break down under the

strain of excessive mental work. This is the type of person with a fine texture of skin and soft, fine hair, usually rather delicate complexion, small features, clean cut and delicate in structure. Broad, high forehead, ears set well toward the back of the head with only medium projection. Prominent nose, usually quite straight at the ridge. Intense eyes, wrinkled forehead and palms of hands. Long slender fingers, straight cut and without muscular developmens. Lips thin and closely drawn; mouth on straight line. Chin small and not prominent, as a general rule, however forcefullness will quite often be demonstrated by the jaw bone. A nature fitted for deep mental concentration and capable of great imaginative and creative work, but not equipped for hard physical labor."

"THE SIXTH NATURE—*Ultra Mental*—Taking the features collectively, is a person whose brain powers overbalances the muscular powers; giving the mind complete domination over the energy of the body and using practically the entire vitality for work of the brain. The top of the head or the cranium is large in proportion to the rest of the head. Small bones, small muscles, fine texture of skin, soft fine hair. Pronounced nervous system; protruding veins showing blueish lines in the skin. The forehead of extreme height and broad across the front. Ears set near the back of the head. The body frail and delicate, with refined features, usually cleancut. Complexion usually quite colorless, but easily made florid by exertion. Small legs, arms and hands with very slight muscular development. Head broad across the eyes, and the eyes set well apart. Mouth either straight or curved down at corners. Nose with straight to slightly convex ridges. Chin not very prominent; however seldom sloping backwards from the lips. Long slender fingers as in the fifth nature; lean and clean cut without muscular development. The face often sloping to an angle from the eyes to the chin, giving a wedge shaped appearance caused by the size of the brain and cranium. Head is high above the ears. This nature is capable of either wonderful scientific work, if

possessed of enough muscular power to sustain the intense strain, or it is quite unproductive. The intellect possessed is the product of the major energy of the body and therefore is even handicapped by the lack of muscular power to sustain it in the intense imaginative and creative work it is capable of doing. It is, of course, hardly necessary to mention that this division of nature is absolutely unfitted for physical labor. The extreme of brain power over muscular power."

"The *six* natures that I have just described, cover all the necessary divisions of human beings; for the purpose of more thorough study into the temperaments, traits, characteristics, and talents of all human beings. The six units give a definite basis upon which to work. *Each nature is possessed of certain ability not possessed by any of the other divisions,* when considered apart, as the distinct and pure class of a specified division of nature. However, the greatest study in Humanology is the combinations of these natures; in other words persons having tendencies toward two or more of the divisions and therefore possessing the traits of more than one nature but not all the talents and characteristics of any one division of nature. It is in this comprehensive study that the single features play a most important part in analysis of people; and this class of reading is only performed, with any degree of proficiency and precision, by a serious study of all parts of the science."

CAUTION

The student must constantly bear in mind that each separate treatise on one of the six divisions of human nature, relates to that extreme, pure nature; as isolated in the field of observation.

BIOLOGICAL FIGURE

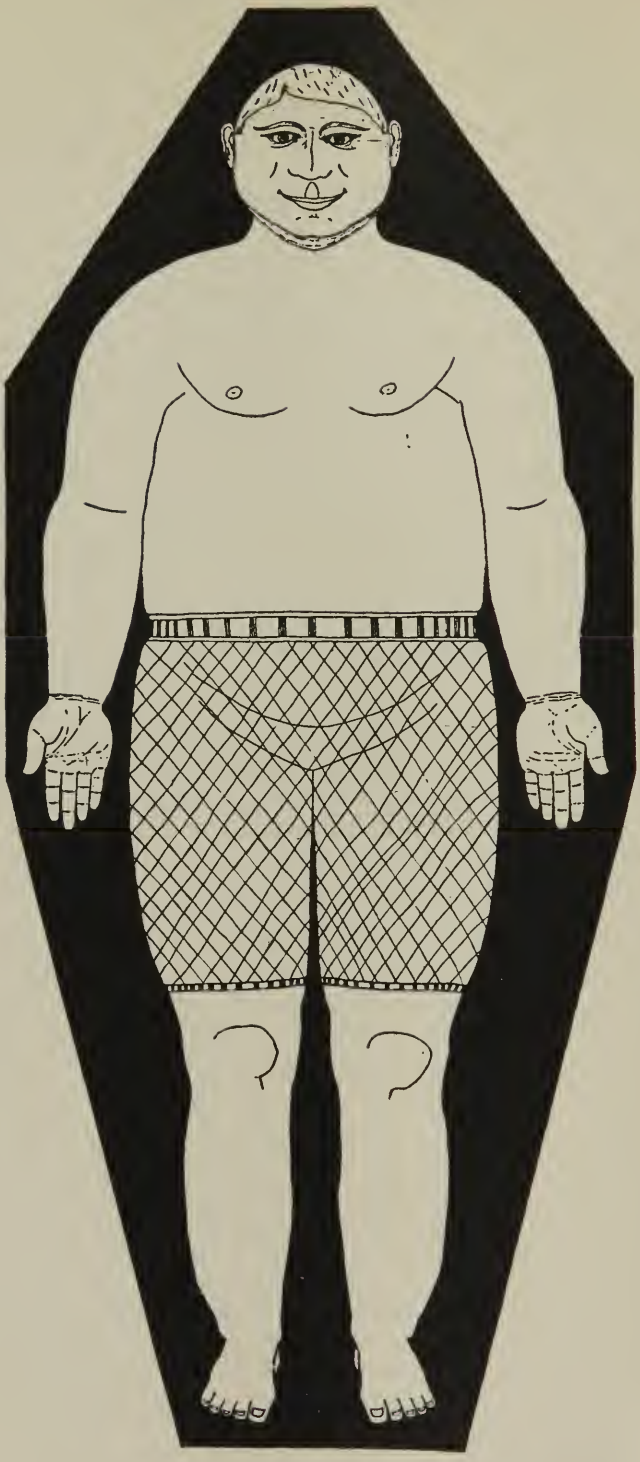

Plate A.

THE ULTRA-PHYSICAL NATURE

The First Division of the Human Scale

CHAPTER V.

The Ultra-Physical Nature

The First Division of the Human Scale

The first division of natures deals with the Ultra-Physical, or people having the most decided tendency toward the physical structure, versus the mental structure; or having the balance between the bodily energy and mental power predominately in favor of the bodily energy. This is the elementary or primary nature of the human scale; with minimum brain capacity and maximum physical avoirdupois, (Plate A). Carefully observe this figure; first beginning at the top of the head. Notice the low forehead indicating a flat brain with the districts of memory, reason and judgment undersized and in unfavorable proportions, for the housing of the brain. Note the high positions of the ears with reference to the top of the head; another evidence of smallness of brain quantity.

Having established that the brain is small in proportion to the size of the head, next observe the general structure of the entire body; and note especially the over development of fat or adipose tissue.

FUNCTIONS OF FAT:—The uses of fat are (1) to serve as fuel and yield heat and other forms of energy; (2) to provide a store of reserve food to be drawn upon in times of need. When the supply of food is insufficient, or in diseased conditions, the body oxidizes, first the glycogen stored in the muscles and liver, and secondly the fat stored in adipose tissue. (3) It acts as a protein sparer. In extreme conditions, when there is no glycogen or fat available, the body may oxidize the proteins of the tissues. If the supply of fat is large, it follows that the proteins of the tissues will be protected.

THE CAUSE OF OBESITY:—Over-development of fat is caused by eating more food than the body needs; especially foods containing fat and carbo-hydrates. This excess is stored in the form of glycogen and adipose tissue.

The needs of different individuals vary, depending on their mode of life, and upon their capacity to oxidize food materials; so that a diet which will give an excess to one individual may in the body of another be entirely consumed. *A sedentary life* and *absence of worry* lessen the oxidation of food products and increase the tendency to take on flesh, while *a very active muscular life* has the opposite effect. Again observe, (Plate A), and note the huge proportions of this physique in comparison to the size of the brain; the small hands and proportionately small feet. The rounded bulky contours of all outlines of the body, at joints, hips, legs, shoulders and arms. Next take into account the overweighted, clumsy build of the entire body; swollen cheeks; double chin; short, thick neck; thick lips; broad, flat nose; pointed eyes set close together, and coarse hair.

We have now determined that the body is grossly large, fat and over burdened; the features coarse and the brain small; hence, we have a comparison or an approximate ratio between the mental structure and the physical structure. We have also learned that excess food builds up excess fat and we find in the proportion of the brain to the body that this excess energy is stored in the body, leaving the brain small and weak. The tendency of this nature, therefore, is to build and store up fat in the body; but it lacks the ability to store up gray matter in the brain, or to even develop good muscular strength. The flesh is soft and flabby; without firmness or density; simply rolls of expressionless adipose tissue. The animal substance, and the name, The Ultra Physical Nature, applies to this physique.

Tendencies

As the brain is small and the intellect of an inferior grade, this nature does not crave for knowledge, except of the elementary sort; books, and literature in general are not appreciated, and the only information sought and perceived is ways and means of the simple life. The overburdened physique makes moving about rather difficult, therefore, the nature takes on a sedentary life and this in-

activity causes increase of adipose tissue and flabbiness of flesh, until almost helplessness prevails. The brain being not only small but dulled in sense by the ever glutonous dissipation of the body in over feeding, lives in a state of comatose, without worry or fretfulness; peaceful, tranquil, and happy; hence, we have the good natured fat person—but hold! Again be advised that we are considering the Ultra-Physical Nature as an *extreme isolated, unmixed nature;* and this fact must not be confused, by including all fat people, for we shall find upon further study that people can be fat, intellectual and only moderate eaters. Some writers have made grave errors in attempting to classifiy *types* of people with regard only to physical avoirdupois, bone structure, and shape, size and proportion of physique; without due regard to the all-important consideration, the Human Brain, and its proportionate, comparative size, shape, quality and activity.

SMALL HANDS AND FEET:—It is notable that this division of nature possesses small hands and feet, which is *apparently* so, when considered with regard to other proportions of the body. The reason for this condition becomes evident when we realize that adipose tissue does not so readily form on those members as upon other surfaces of the body; owing to the bony structure and thinness of the flesh, therefore, they do not enlarge proportionately to the body and retain more of a muscular build. This eventually gives them the appearance of being small, however, if compared to more normal persons, the smallness seems to fade away and they are found to be relatively large. Compare the feet and hands of (Plate A), with the other natures.

LOVE OF SLEEP, AND REST:—Lethargy is possessed by the over-burdened, dull sensed, dissipated body of the Ultra-Physical. Rest, ease, comfort, and luxury are much appreciated, and the soothing influence of sleep is bliss and paradise to this huge body and small brain. So to please, give them rest, and to punish demand work.

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POSITIONS OF THE ULTRA-PHYSICAL EARS:—Mental functions of the brain, as memory, reason and judgment, are centered in the anterior areas of the cerebrum or the upper portion of the head, in front of ears; while motor or muscular functions are mostly located in the Central Districts of the cerebrum and co-ordination in the Posterior Districts comprising the cerebellum (back of the ears). It becomes evident that the Ultra-Physical ears are located well forward, (from side view), thereby showing nearly one half and occasionally more of the head, back of the ears. The ratio between the portion of the head in front and the portion behind the ears gives a relative measure of intellectual and physical balance of power, and as we know of the pronounced preponderance of physical energy over mental power, in this division of nature, the position of the ears affords a pertinent key for observation and classification. The most ideal position for ears, is to have one third of the head back of them and two thirds in front, with high cranium above.

INTERESTS:—Owing to limited mental scope and the lack of muscular strength compared to physical avoirdupois, this nature is not interested in deep subjects or sports that require activity and energy, or strenuous exercise, and because of the suavity of disposition, quarrels, or arguments are avoided as much as possible. The interests of this nature are those ordinarily attributed to the Youth, Comedy, and Catchy Melody, funny stories, sweetmeats, riding on trains, "Wild West" moving pictures, ice cream, sweet drinks, the circus, and people are all pleasing and interesting. As this mind is not creative, imaginative or constructive, the wonderings of the faculties are confined mostly to the naturally realistic, and depend for occupation upon the ideas of others. This gives rise to the traits of dependency upon associates for amusement and interest. They cannot entertain themselves by books or planning or imagery. As the child, this nature is inclined to be tenderhearted, and kindness, generosity and a yielding disposition are possessed. Relative to this, a tendency to become insis-

tent upon kindly attention and to be humored oftimes obtains, as in the case of the "spoiled child." This leads to resentments and pouting over trivial matters. Sternness and domination easily conquer this nature; for being so unaggressive slight retaliation is made.

WHAT DOES THIS NATURE MOST NEED?—Lack of mental power is the weakest point in this nature, therefore, every effort should be made to develop the brain capacity to the utmost. Over-weight is the next consideration, and to change the body from flabby flesh to strong muscles, active, strenuous work should be undertaken; especially out of doors, where there is plenty of room to move about. Over indulgence in food should be avoided, and reading should be made a part of each day's leisure time. The weak mentality usually tries to avoid responsibilities and will go a long way around to keep away from them; this is the gravest failing in their business success. Aggression should be cultivated to a reasonable extent, and the imagination should be exercised as much as possible. The inclination to give up easily and back down from the other person is only overcome by the development of brain power, backed with muscular energy.

THE STRONGEST ASSET:—Good nature and the faculty for making and keeping friends is an innate tendency and trait of the Ultra-Physical. To oblige gives them pleasure; and a display of interest in people can be observed at all times. Enemies are seldom made and disputes always avoided when possible; hence, in business of an elementary kind, the Ultra-Physical are often quite successful as the child-like innocence, good nature and even disposition appeals to many people.

HOW TO FAVORABLY IMPRESS:—If one desires the Ultra-Physical nature to do certain things, diplomacy can be used to a greater extent than with any of the other divisions. Meet the nature as nearly in its own field of thought as possible. Try to see things in a simple way, and talk accordingly. Be polite, unaggressive, mild and

gracious. Do not be in a hurry; go slow and explain thoroughly as you progress. Be plain in manners, and above all do not display too much of your own intellectuality. In other words, walk in upon the same plane and conduct yourself in the most human way. Many times you can coax a child to do something, when all other means fail; likewise, the Ultra Physical.

IN DOMESTIC LIFE this nature is "right at home", a home lover, good provider; contented to sit out on the porch in the large easy chair and watch "the world go by." Constant, dependable, loving and true; not disposed to worry over trifles or become alarmed about finances; for they have great faith in the goodness of humanity, and a most optimistic, innocent trust in the future.

A lover of children and a great favorite among them. In fact so much tolerance is possessed that oftimes the Ultra-Physical is inclined to "spoil" the children of the family for lack of stern control over them.

It is usually, however, a happy home, where friends come often and receive royal hospitality. The table is well supplied with plenty of food for all; and ease and comfort can be found in the furniture that this Nature buys.

Marriage of the Ultra-Physical should be, if possible, with one of the Mental Natures, as the home needs one mind that is intellectual enough to do the planning and management, both domestical and financial.

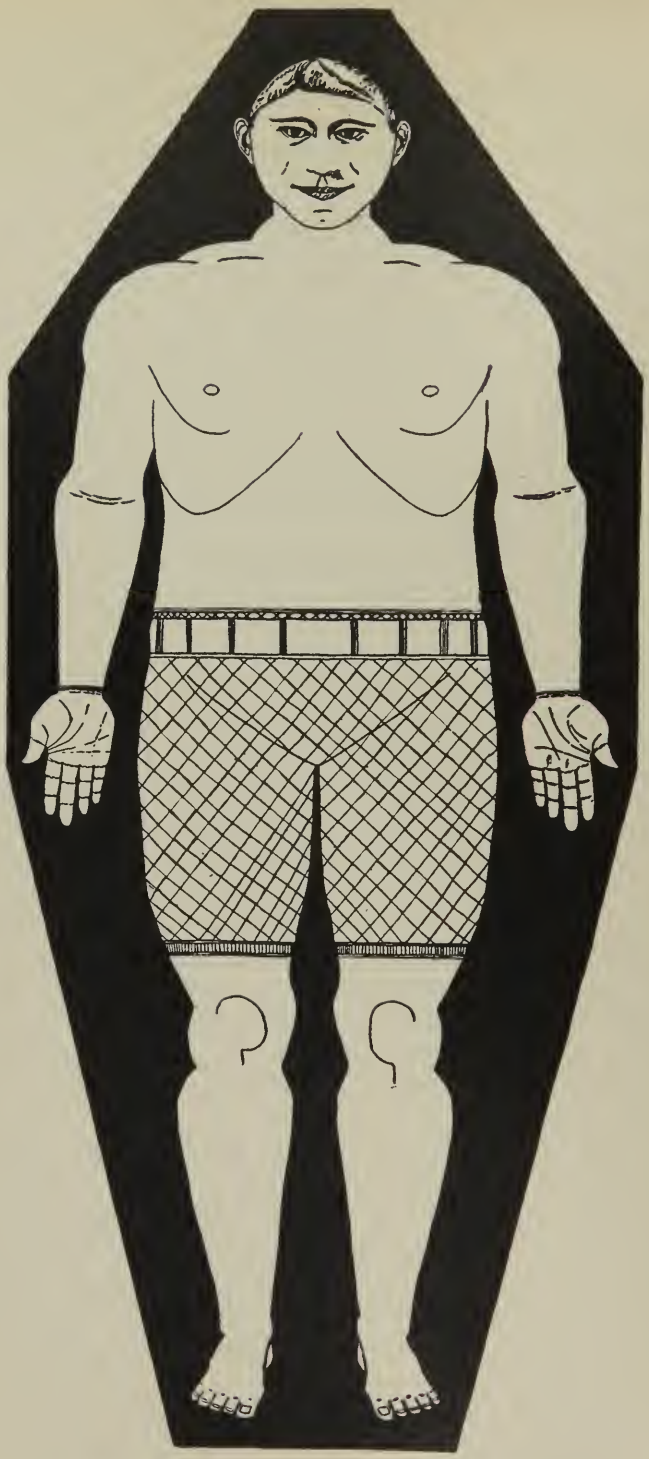

Plate B

THE PHYSICAL MUSCULAR NATURE

The Second Division of the Human Scale

CHAPTER VI.

The Physical Muscular Nature

The Second Division of The Human Scale

The second division of natures deals with the Physical Muscular, or people having the most decided tendency toward the muscular structure, versus the mental structure; or having the balance between the muscular energy and the mental power predominately in favor of the muscular energy.

This, the second division of the scale, depicts the physique of extreme muscular development and sturdy frame, with low development of the mental organs, (Plate B). Examine this figure carefully, giving strict attention to the low forehead, which is just a degree higher than the Ultra-Physical but still undersized and significant of the small brain. The ears are a bit lower, from the top of the head; however too high for efficient mental capacity.

Having established that the brain is small in proportion to the size of the head, next observe the face and note the firmness of the periphery, and outline of the cheeks and chin. The puffiness of the Ultra-Physical is not there, but instead we realize a more muscular outline, indicating greater density of the structure. Facial features are large, lips quite thick; dark skin and coarse hair; heavy eyebrows, hairy body. Eyes without depth and lacking expression. The neck thinner and taller; sturdy and rigid; while the shoulder, elbow, knee, leg and all other muscles of the body are large, conspicuous, abnormally developed and denote great strength and physical endurance. A muscular machine, for example, the "draft horse" of the human specie. A giant of physical rigidity and power, but possessed of a small brain and therefore low mentality.

Carefully compare every joint, and member of this physique, the hands, feet, bodily proportions and outlines with (Plate A), and note the *square* shoulders, angular joints and hardness of outline. You see strength, power

and energy in the Physical Muscular; while a clumsy, soft overburdened and comparatively weak structure is expressed in the Ultra-Physical. Both brains are small and elementary, the Physical Muscular being a trifle the larger and more active and practical.

THE MUSCULAR STRUCTURE is composed of muscular tissue by means of which the *movements of the body* are produced. It constitutes the fleshy parts, enters into the structure of many of the internal organs; forms from 40 to 50 per cent of the weight of the body.

Muscular, like all other tissue, is composed of cells and intercellular substance, with this special difference, that the cells become elongated. The intercellular substance consists of a small amount of cement, which helps to hold the cells together. The cells are really bound into bundles by a framework of reticular tissue.

Muscles are of three distinct kinds—STRIATED OR CROSS STRIPED:—NON-STRIATED OR PLAIN, and CARDIAC.

Striated or cross-striped muscular tissue is distinctively marked by strial, or parallel cross stripes. It is also called *skeletal* because it forms the muscles which are attached to the skeleton, and *voluntary* because it is nearly always under the control of the *will power.*

The muscles are separate organs, each muscle having its own sheath of connective tissue called epimysium. They vary in size from a fraction of an inch to nearly twenty-four inches (60 cm.) and are of divers forms. In the trunk, the muscles are broad, flattened, and expanded; forming the walls of the cavities which they inclose. In the limbs they are of considerable length, forming more or less elongated straps. A typical muscle is described as consisting of a body and two extremities. The body is the red contracting part and the extremities are the ends where they are attached.

Muscles are attached to the bones, cartilages, ligaments, and skin, in various ways; the most usual attachment is by means of tendons.

The term *origin* is applied to the more fixed and stationary end of a muscle, while the term *insertion* is applied to the more movable attachment. The origin, however, is absolutely fixed in only a very small number of muscles, such as those of the face, which are attached by one end to the bone, and by the other to the movable skin; thus aiding the power of *expression.*

Non-striated or plain muscular tissue has transverse striae or strips. It is also called visceral because it constitutes a large portion of the substance of many of the viscera, and *involuntary* because it is usually withdrawn from the control of the *will power.*

Cardiac Muscular Tissue is found only in the heart substance. It is involuntary, but is striated, though not as distinctly as skeletal muscle. It is made up of cells grouped in bundles which are mainly held by reticular tissue, that forms a supporting framework in the heart.

Characteristic of Muscular Tissue —Muscular tissue is highly specialized and exhibits irritability, contractility, extensibility, elasticity and tonicity. *Irritability* has been defined as the response of a tissue to a stimulus to perform its special function.

Contractility is the power which enables muscles to change their shape, so as to become shorter and thicker. It is possessed to some degree by all living protoplasm, but is highly developed in muscular tissue. *The sum of the contractions of such tissue results in motion.*

Extensibility of a muscle means that it can be stretched or extended, and *elasticity* that it readily returns to its original form. *Tonicity* is the constant and insensible tendency to contraction, which exists under normal conditions.

The Function of the muscles is to contract, and the contraction of a number of muscles is expressed in motion, accordingly, contraction is the means by which all the various muscular activities of the body are possible.

Stimuli is used to describe influences which stimulate muscle cells. They may be chemical, mechanical, thermal, electrical, or nervous. From the standpoint of physiology

the nervous impulse is the most important, which in Humanology becomes the mental phenomena caused by the Brain and the Spirit. Every step that we take is the result of a distinct mental phenomenon, at a nerve center in the brain. While, on the contrary, the contractions of the heart are due to an inherent mechanical rhythmic tendency of the muscle itself.

NERVES:—Muscular tissue is well invested with nerves. Certain nerves convey impulses from the central nervous system to the muscles, and control their contraction. These are called *Motor Nerves*. Certain other nerves have sensory end organs in the muscles. These convey to the central nervous system the state of contraction of the muscle and hence are called sensory nerves. By means of these sets of nerves co-ordination activities of groups of muscles are brought about.

INCLINATIONS of the Physical Muscular Nature—It is apparent that a nature possessed of extreme muscular development is active; for the very structure of the physique denotes power; and power signifies action. The kind of power possessed implies the nature of its action, and as we have learned that this division has a predominant amount of muscular energy and little mental power it becomes evident that the inclinations are along the lines of muscular activity; work, toil and labor, or anything that requires physical endurance versus mental keenness.

This nature can come in from the harvest fields with the other "hands" the least affected from the hard day's work; but confine the Physical Muscular indoors for a day, occupied with mental work of even a light order, and you will see a tired and fatigued person in the eve.

Activity of brain has much to do with its general efficiency, and likewise activity of the muscles determines the ability possessed for certain classes of work, and movements. It becomes necessary to differentiate between natures of quick and slow muscular activity; the Physical Muscular being of slow but powerful movement,

while the Muscular Mental and Mental Muscular Natures are of quicker activity and more capable.

The Physical Muscular division is over-weighted with large, rigid, thick muscles, which are not so acutely responsive to irritability, contractility, extensibility and elasticity as the thinner and more sensitive muscles; hence, quickness, nimbleness and deftness of movement are lacking. This condition has a great influence over the personality and disposition of the nature and is the *basis* upon which the Physical Muscular is classified.

As the brain is elementary, little interest is manifest in books and knowledge of the higher order, while like the Ultra-Physical Nature, the ways and means of the simple life appeal. There is, however, a much more practical insight for mechanical and structural work, and a desire for accomplishment. This leads to industry and accounts for the Physical Muscular always doing something. As leadership and domination is not possessed, and oftimes a non-responsive disposition, the nature has little inclination for business and prefers to work at a good job, where pure bone and muscle is required.

While the Physical Muscular has large jaws and full face, still the square jaw oftimes attributed to muscular *types* does not apply, unless blended with one of the Mental Natures. The square jaw denotes will power of a higher order than that possessed by this nature, and is typical of the Mental Muscular. The hands are well developed, square and angular, with large thumb and finger muscles.

TRAITS:—This nature is dependable, steady and persevering in work, and a generous, sincere and solicitous friend. It is a nature that places confidence in people and expects fair play in return. Once you have broken faith with this nature, or have disrespected the sincerity expressed, then a wound has been made in the friendship, that is exceedingly difficult, if ever possible, to entirely heal. The mind of the nature, as the muscles, functions slowly and deliberately and once an injury is received, it becomes firmly held in the mind and to erase its imprint is a task that

but few offenders can accomplish. The nature is not given to continual hate but simply avoids those who have misappropriated the generosity and the sincerity of the good will offered.

Riches seldom come to the Physical Muscular except in a moderate measure, as the inclination for a steady job of muscular rather than mental duties is not conducive of high recompense; however, a good living is usually obtained; and the desires of the nature being simple, plain food and ordinary clothes, and not much style, it is evident that very little money is wasted for luxuries. *Practicality* is the keynote of this and all other Muscular Natures.

Often you will find this nature owning property, usually the home, and it is either paid for or being carefully paid off. Real estate men concur in their opinion that the muscular man is good pay and dependable, straightforward, frank, serious, and fair minded.

Socially, the Physical Muscular is less inclined than the Ultra-Physical, a few close friends of plain habits and talk are appreciated but quite sufficient. The nature, while democratic, cannot tolerate a conceited or egotistical person and the snob is in contact with a "cutter" when dealing with the Physical Muscular.

Music of an invigorating air, is pleasing to the nature; it must be stirring and forceful, with loud instruments and a good base drummer. Sports appreciated are of the manly sort. Football, more than baseball, and boxing rather than wrestling, discus throwing, rowing, swimming, and most aquatic sports are indulged in.

ASSETS:—The chief assets of the nature are physical power, industry and productivity, generosity and sincerity.

TO CONVINCE this nature, be practical, plain-spoken and sincere; respectful and not overly persistent. Deliberate at length and keep always in mind that the mental process of the nature as well as the muscular movement is slow. To force one of this nature is difficult and dangerous as strength always bespeaks confidence of self protection and this often leads to immobility of attitude; if the aggressor is not absolutely logical and respectful.

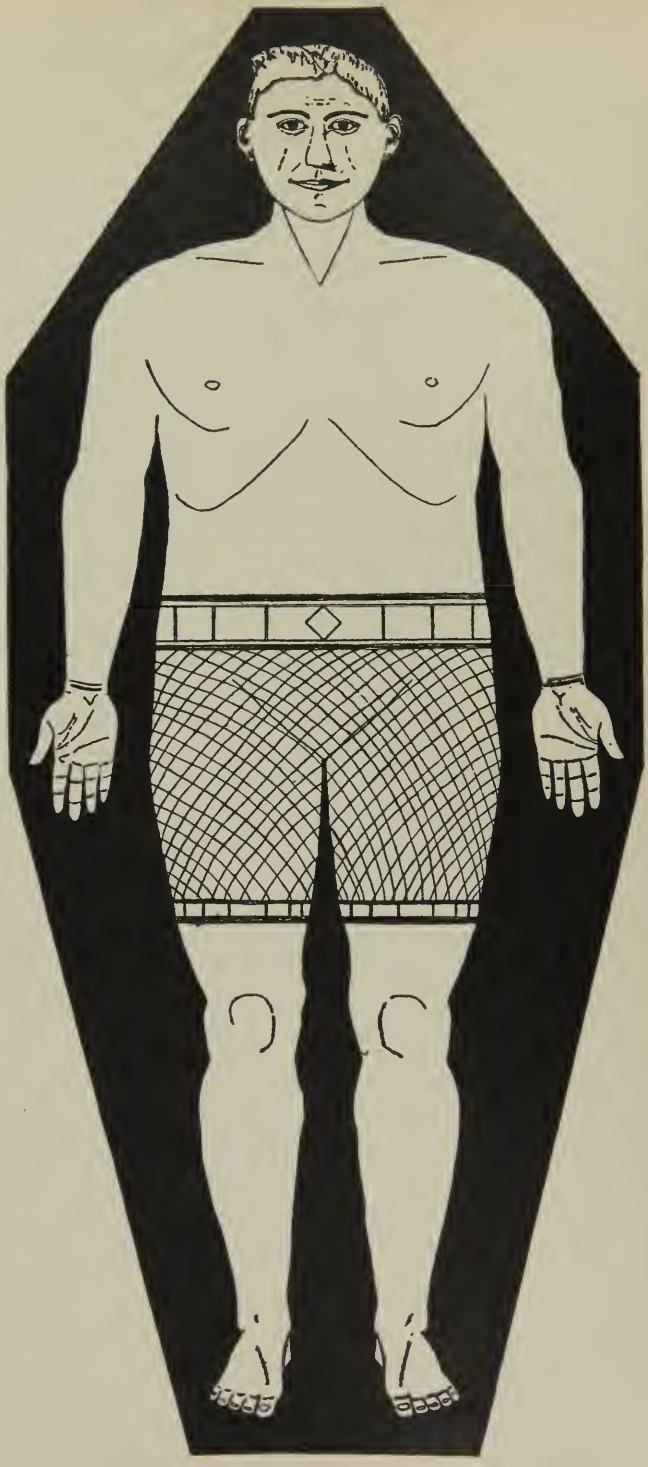

Plate C

THE MUSCULAR MENTAL NATURE

The Third Division of the Human Scale

CHAPTER VII.

The Muscular Mental Nature

The Third Division of the Human Scale

The third division of nature deals with the Muscular Mental, or people having the muscular structure predominately evident in physique, and also fair *mental* capacity. The *balance* between the muscular and mental power is more evenly divided; for the brain is larger, and has deeper convolutions, indicating greater mentality, and therefore power of perception. With this more even balance between the muscular and brain energy, a total division of the entire physical vitality of the body obtains, and lessens to an extent the size and power of the muscles and size of the bones or framework; while the brain and cranium become larger and function more efficiently.

Observe plate C, beginning with the head. Notice the fullness of the cranium and the breadth across the upper portion; especially the rounded convex outline at the side of the head above the ears, where reason and judgment reigns. Next, consider the position of the ears and the height of the head above. This evidences a larger brain than either of the foregoing natures. Note the height of the forehead and breadth of same, and carefully compare this with the Ultra-Physical Nature and Physical Muscular Nature. You will note the increase in size, which signifies more capacity for memory and perception, more wrinkles appear in the forehead, indicating greater concentration and the mental influence. The hair is finer; the nose more prominent and of better outline; the eyes of deeper intensity of thought and the lips somewhat thinner; the hands in good proportion and more graceful in outline. All signifying greater refinement of nature and the mental influence. The shoulders square and muscular; arms, chest and legs well developed but not over burdened with flesh; the neck well formed and of good outline. The entire physique denotes muscular power of an active kind.

A stalwart, rigid frame, well proportioned in all its parts and efficiently covered with muscular tissue and flesh that readily responds to irritability, contractility, extensibility and elasticity; and all of this conjointly established with the larger and more efficient brain. Compare Plate C. in every respect, with Plates A and B. The foreheads, features, necks, shoulders, arms, hands, trunks, legs and feet. Fully establish in your mind the exact differences that you find and the reasons therefore as above analyzed. Because of greater mentality, the ear will be nearer the back of the head than in the first and second natures; leaving approximately three-fifths of the head in front of them.

With the added brain or intellectual power, it now becomes necessary to consider the many influences this equipment gives to the body; and the greater capabilities possessed through the acquisition of mental strength. This is the nature with which we really begin to observe the wonders of that God-given treasure, the Human Mind, and its wonderful influence over the physical self.

The brain being of better form and fertilized with considerable gray matter, becomes a more prolific field for mental phenomena, as the spirit has more thoroughness of contact with the millions of cells, and the influence thus exerted produces a higher quality of mind than it is possible to obtain with the dwarfed and ill-shaped brain. More refinement will be observed in this nature, as to habits, inclinations and life in general; however, this characteristic is not so observable as in the fourth, fifth and sixth Mental Natures; but upon comparison with the first two natures it is quite evident to the student.

Activity of mind and body produces the ever alert and doing individual. This trait is emphasized in the Muscular Mental Nature; for the muscular system being fully vitalized and sturdy, but still not too large and overweighted, develops grace and quickness of movement that is reflected through not only the brain activity, but in every muscle of the body.

INCLINATIONS—In the field of sports we find the tall Muscular Mental Nature is the recognized *leader.* Basketball, baseball, football, running, jumping, rowing, swimming, skating, boxing, wrestling, bowling and fencing. Any sport that requires quickness of action and muscular stability. Long arms and legs are typical of this nature. In the day's work, energy and activity are demonstrated and impatience is observable, when delays occur and something "holds back"; for that ever-lively, well proportioned muscular system, together with mental vigor and enthusiasm, must be occupied and producing; however, depth of business reasoning and broadness of judgment are not pronounced, as physical skill is developed to the detriment of imagination. How often do we find the good athlete to be a shrewd business man? He may do fairly well in some lines of business but usually his inclinations are in other directions; therefore, he trys to avoid business and prefers to work for others, doing strenuous duties that require muscular agility and mental association.

Co-ordination of hand and mind makes it possible for the human mechanism to respond to the mental phenomena and the utmost proficiency of handiwork is achieved, when the control is perfect. In the Muscular Mental, we have the beginning of this type of ability; however, not under sufficient mental power to produce the genius. It is well to note, at this point, that the genius is seldom found in any pure, distinct nature, as it usually requires a combination of two or more natures, in the same person, to develop sufficient breadth of ability to reach the goal of a genius. For instance the Muscular Mental has acuteness of muscular control, but insufficient depth of reason and imagination; therefore, a combination of the Mental Affirmative and the Muscular Mental would produce the artist of painting, sculpture or architectural design, while a combination of the Physical Muscular and the Mental Muscular produce the great vocal artists.

Great artists of all allied arts are usually and predominately possessed of sizeable hands and well proportioned fingers. This betokens the muscular structure; however, deftness of motion and the "Mental Touch" must be pronounced.

This nature is more given to expression than the first and second divisions, and therefore more entertaining and interesting; while not a book lover, still fond enough of literature to read and acquire some general knowledge. The sport page of the newspaper is often the first to be perused by the male Muscular Mental, but other head lines are also scanned before leaving the issue. Popular fiction comes next in favor and good stories are appreciated.

The nature is kind and considerate and not aggressive unless provoked to an act of violence. Seriousness and calmness are outstanding traits, coupled with a youthful sense of humor and friendliness.

This division of nature is *mechanically adept;* and produces tradesmen of the highest order. It has been proven by careful observation in the practical fields of mechanical vocations, that fully eighty per cent of the best mechanics are of the Muscular Mental Nature. Workers of the metal trades in general, plumbers, steam fitters, tinners, structural steel and shop men, are predominately of this nature, also masons, carpenters and millwrights, electricians, automotive mechanics and general machinists, locomotive engineers and builders of agricultural machinery, and shop machinery.

Clever control of muscular motion and endurance coupled with sufficient mental association is the direct reason for possession of mechanical ability. Added to this fact is the ever-present consideration of inclination. The Muscular Mental has the balance between muscular and mental power just enough in favor of the muscular to give to the nature mechanical inclinations; while the fourth division or Mental Muscular is influenced by added mental power and this has a direct bearing upon tendencies in other directions.

Powerful movements, force of action, in both walking and talking, and a loud voice are typical. Freedom of action is demanded. The Muscular Mental is not contented to be confined indoors at sedentary employment; the muscles must be kept in action and inertness destroys the real natural functions of this physique. Restlessness, nervousness and ill-temper develops.

Acrobats are predominately Muscular Mental. Observe them in vaudeville and the circus; they always lead in daring and confidence of muscular power and quickness of motion; due to the irritibility, contractility, elasticity, and extensibility of the muscles.

Owing to the muscles of the larynx, the organ of voice, in the upper frontal part of the neck, together with delicacy of control, we find that the basis of vocal ability is possessed by this nature; however, a combination with one of the other Mental Natures produces greater mental discretion, and adds to the power of expression; therefore, while great vocalists are not purely of this nature, still every renowned star of vocal accomplishment is predominately a part of it.

The necessities of life are of vital consideration to this nature; while luxuries and ease do not become an important consideration. The plain life of a simple soul is sufficient to give contentment and happiness. The industry possessed is a sufficient safeguard to warrant a good living and reasonable comforts in the home. You will find it primarily a practical home, with the necessities all provided for in a most complete manner. The little garage in the rear yard is more likely to contain an automobile of the five hundred dollar class than an expensive make.

Plain and practical clothes are the rule, modest in cut and color.

THE LEADING ASSETS of the Muscular Mental Nature, are evenness of disposition, desire for work and activity, muscular fitness and cleverness of control; endur-

ance and dependability, practical mechanical inclinations, and sober judgment.

TO CONVINCE, be practical and straightforward, not too technical or eager, but display enthusiasm and energy in conversation and be respectful and friendly.

TO ENTERTAIN:—The Muscular Mental is comparatively easy to entertain; the nature is fond of many sports and enjoys the theatre, preferably vaudeville, or musical comedy; popular airs and clever dancing.

While not a versatile conversationalist, still a good listener and responsive to questions.

Outdoor recreation is always appreciated and the automobile tourist with tents, field stove and folding cot is typical of this nature. Picnics, cross country hikes, hunting and fishing are appreciated; while the woodlands, rivers and lakes are customary haunts of this stalwart nature; fashioned in many respects after that of the Red Skin Indians of America, and not adapted to city life.

THE FARMER—The enduring farmer and farm hands are found to be predominately of this division, as lovers of nature, the farm and rugged free, open country appeals, and the simple life is quite acceptable, while the manual labor and physical activity demanded is willingly performed.

A contented worker with the plow, harrow, mowing machine, and reaper. Lover of horses and the live stock on the farm. Handy with tools and possessed with ability to repair the auto truck and tractor.

Interested in developing and planting the land; and commercial enough to arrange for the proper disposal of the farm produce. Traits of the successful farmer are therefore possessed.

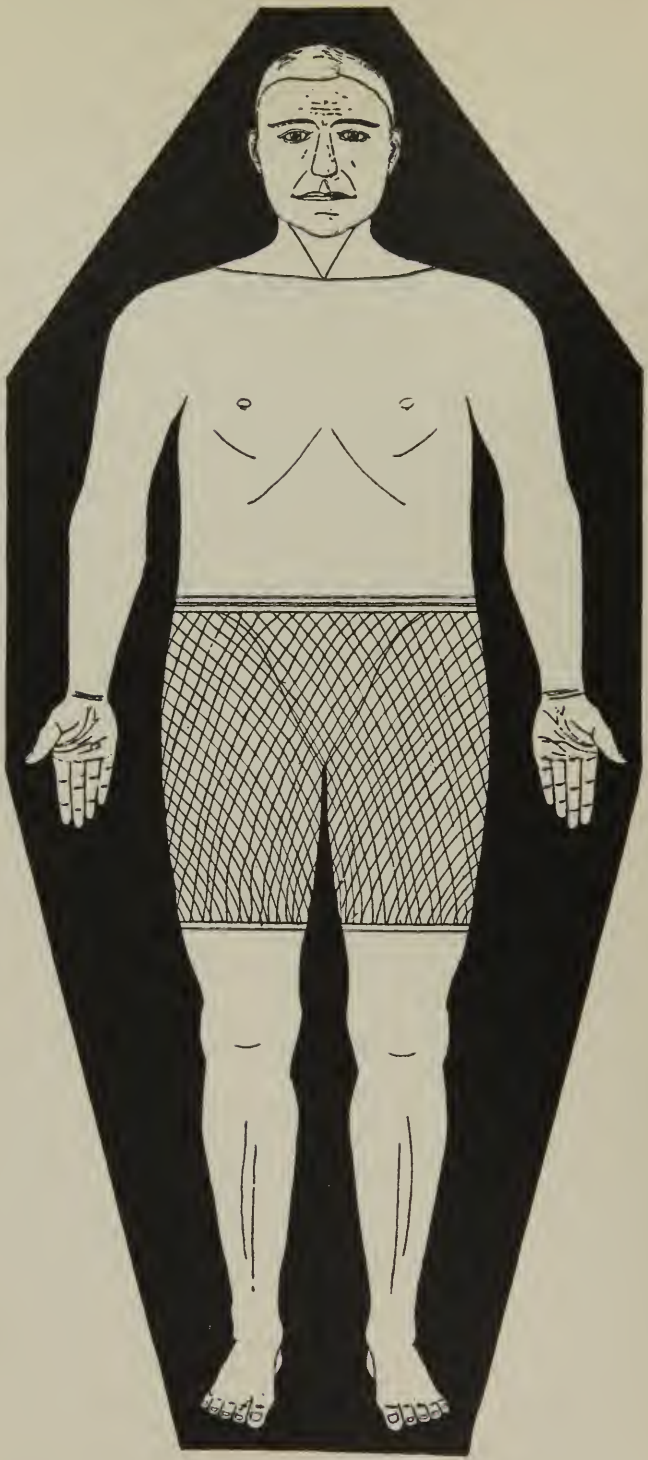

Plate D

THE MENTAL MUSCULAR NATURE

The Fourth Division of the Human Scale

CHAPTER VIII.

The Mental Muscular Nature

The Fourth Division of the Human Scale

The fourth Division of Nature deals with the Mental Muscular, or people having the balance between the mental and muscular power in favor of the mental equipment to the extent that the muscular energy is so influenced by the mentality that it becomes more thoroughly controlled. The Spirit having a more perfect brain to work with develops mental phenomena of a higher order and consequently power of mind, clearness of thought and perception; memory, reason and judgment. With the balance tilting toward mental energy, vitality and power, we discover that the physique has sacrificed in sturdiness of structure and muscular power, to the enhancement of mentality; however, not to the extent of depleating the physical powers for any duties of normal life; the proportion being so ideal that the mental muscular becomes the most efficiently balanced, and generally capable of all natures.

As whales are the giants of the ocean, lions the kings of the jungle, and eagles the masters of the air, the Mental Muscular domineer in the human race, because of the unique correlation between mental and muscular power. Taken in its pure unmixed state, this nature is nearest the acme of perfection, of balance and capability, than any other unit of the Human Scale. Here, we have a completely equipped human structure, with all appointments of sufficient size and perfection of "design" to meet any and all requirements of the business, professional and social world and this structure possessed of a physical power plant capable of supplying force and energy enough to operate to full capacity every department of the structure.

We found, in the Ultra-Physical, lack of both muscular and mental efficiency; in the Physical Muscular, a superabundance of tense muscular power and inferior mental capacity; in the Muscular Mental, sufficient and ideal muscular energy that overbalanced the mental equipment,

just enough to incline the nature toward the physical accomplishments and to the neglect of mental development; while the mental muscular is possessed of good muscular development and still greater mental power; hence, we have the approach to perfection and unity; and great creative, imaginative and constructive work can be executed. (Plate D).

In the philosophy of the present century there is much reminiscence of the biological psychology of Aristotle. From the *primitive* or nutrient soul, which has to do with the vital functions of growth and reproduction, arises the *sentient* soul; concerned with movement and sensibility; and finally emerges the *intellectual* or reasoning soul. These three parts are not mutually exclusive, but the lower foreshadows the higher and are subsumed in it; as each nature of the Human Scale foreshadows the higher attributes of each succeeding nature, and becomes partially subsumed in it.

You are now familiar with the system of observation and your attention is directed to Plate D, where careful and detailed analysis of the Mental Muscular figure should be made. A minute comparison with the first, three natures is important.

Note the finer hair, higher forehead, broad across the front and well rounded out above the eyes and full prominent cranium; higher above the ears. From lateral view, the ears of this nature are situated so that two thirds of the head appears in front of them and only one third behind. Note the wrinkles of concentration in the forehead; eyebrows on nearly a straight line and at right angles to the ridge of nose. The pronounced breadth between the eyes; prominent nose, occupying about one-third the frontal facial plane and chin; large mouth with thin lips; square face and jaws; sturdy neck, square, manly shoulders; well proportioned arms and hands, legs, feet and general structure.

The body is neither too heavy or too light; the muscles do not protrude, still they are in evidence to the extent that

physical energy is expressed. The skin is of medium fineness of texture. Now compare the head with the bodily proportions and note the size and shape of the cranium to the lower part of the head. Here you observe brain capacity or a well-developed mental machine. The eyes express depth of mental comprehension and seriousness of purpose.

Muscular control is centered in the brain and the motor nerves act as the conductors of messages from the brain cells to the muscles; therefore, we touch with our brain just as truly as we hear with it, and all motion, or physical acts, of any kind or class, betoken the thoroughness of the mental phenomena, or the lack of efficient mental influence. When you place a fork, with food, in your mouth, many muscles of delicate sensitiveness are brought into play.

The shoulder, elbow, wrist and finger muscles all act, and also those of the jaw, lips and tongue. If the muscles of the arm were not under control it would be dangerous to move the fork toward your face, as it might be thrust into the eyes; but you do not worry about an accident of this sort, for your muscles are found to be under absolute control of your *will.* They are slaves of the motor nerves, held, bound and shackled; so that movement is impossible without your will power giving the order; and that order is carried out if your physical endurance and muscular power is sufficient to accomplish it. Delicacy of movement and touch all depends upon the order of mental power.

This Nature is possessed of a high calibre of mental apparatus, and also an efficient muscular system, well controlled and given to the performance of difficult tasks; that require both nervous stamina and perfection of movement.

INCLINATIONS:—Energy, industry and mental as well as physical endurance, brings forth the worker and producer, and coupled with will power, memory, reason and judgment, forms a combination out of which emerges the executive of high calibre. All this obtains in the Mental Muscular; therefore, shrewd business ability and leader-

ship are pronounced and the inclination for assuming responsibility in business ventures is possessed to a greater extent than any other division. The manufacturer, merchant, contractor, organizer, promoter and financier are familiarly found in this field of nature.

Aggression, fearlessness, and confidence, together with reason and judgment, is the secret of the inclination for business life and the success so often achieved by the Mental Muscular.

No problem is too difficult to undertake, and it is usually encountered with vim, assurance and enthusiasm. Long hours, constant application and even drudgery do not forestall this nature; as persistence is a trait well established and faith in ability possessed leads this Nature onward and forward with the determination that brings success through hard, honest endeavor.

So we have the money maker and, therefore, the collector of worldly goods; but still the practical person, democratic and congenial. Broad minded, far seeing and ever cautious and sensible. The possession of money does not disturb the ego of this nature as much as it does the fifth and sixth divisions, for while socially inclined, it is always enthralled with the practical cloak of plain common sense.

The Nature is possessed of a good constitution, sound, expansive lungs, sturdy neck, large nose and mouth and a well behaved muscular system; coupled with a mind of imagery and reason; hence, we have the orator of force and conviction; personal magnetism and bearing. More inclined to practical, and scientific discussion than wit, humor or fiction. The only orator of more pronounced ability and greater innate resources, such as depth of thought, vividness of imagination, grace of poise and cleverness of delineation is found in a combination of the mental Muscular and Mental Affirmative Natures; adding power of intellect to muscular equipment.

Creative constructive and productive ability is the development of a well balanced nature. Most combinations

of natures carry the balance too far one way or the other; and we find in the Mental Muscular, the qualifications that come more nearly being ideal than any other unit of the Human Scale; however, the inclination is for practical creations and inventions usually of the mechanical, or structural order rather than the compositional, or chemical.

Great Artists, sculptors and composers are found in this nature more than any other pure division; and again we find that the acme of perfection is possessed by the combination of the Mental Muscular and Mental Affirmative; while distinguished ability reaches through all combinations of the mental natures; except a distinct combination of the Mental Affirmative and the Ultra-Mental divisions.

Entertainment of the higher order is appreciated. The theatre, good drama, comedy, or vaudeville. Both popular and classical music, and aesthetic environment; but this practical nature demands comfort rather than style, and prefers to attend informal affairs, where too much toggery is not required. So at the opera, a business man of this nature is likely to be seen in business attire; while a Mental Muscular lady may have a high cut gown, and the Mental Affirmative and Ultra-Mental patrons will very likely be observed in formal attire with no end to extremes.

A lover of sport both in and out of doors; for energy and ambition requires recreation and this the Mental Muscular indulges in, freely and with the same enthusiasm that accompanies the business life. Golf is a favorite pastime, also tennis, baseball and aquatic sports in summer, and handball, bowling and billiards in winter.

This nature is inclined to have good clothing, conseratively cut, modest in colors, and neat in tailoring and fit, but always of the practical pattern, and not "overdone."

The creative mind is imaginative and this always leads to the desire of food for thought; therefore, beginning with this division of the Human Scale, the inclination for reading and study is expressed. Good literature is demanded and usually of a practical nature. Fiction is rarely in-

dulged in to any extent by the male Mental Muscular; while "Judge", "Puck" and "Life" have an appeal.

The newspapers and periodicals are necessary for leisure moments, and consume most of this time; while scheming, planning, imagery and business problems are always paramount.

As to professional vocations the Mental Muscular is not so contented, being too impatient and active to be held down to the confinement and routine of practice. Observation proves that a combination of this nature with the Mental Affirmative or the Ultra-Mental develops the more adapt professional nature; less inclined to find such duties irksome. The profession of law is more accepted to Mental Musculars than any other, as it bears so much upon business entanglements and gives opportunity for forceful expression, aggression, shrewdness, "a matching of wits", and oratory. The architectural and engineering professions fall next in line as they afford scope for creative and constructive thought and practical adaptations.

ASSETS:—The Mental Muscular Nature is first of all practical, logical, cautious, sensible, creative, executive, and capable in the business world generally. Vitality, fearlessness, and determination coupled with industry produces the success that is so often enjoyed.

TO CONVINCE:—Be practical, logical and forceful, you may be technical but do not fail to be comprehensive as this nature is shrewd enough to think over every angle of a proposition and if a flaw is there, you may be quite sure it will be discovered, as caution is a predominant trait. Urging does very little with this division, while good sound reasoning and facts will make a deep impression; for again observe, that practicality is the "keynote".

BIOLOGICAL FIGURE

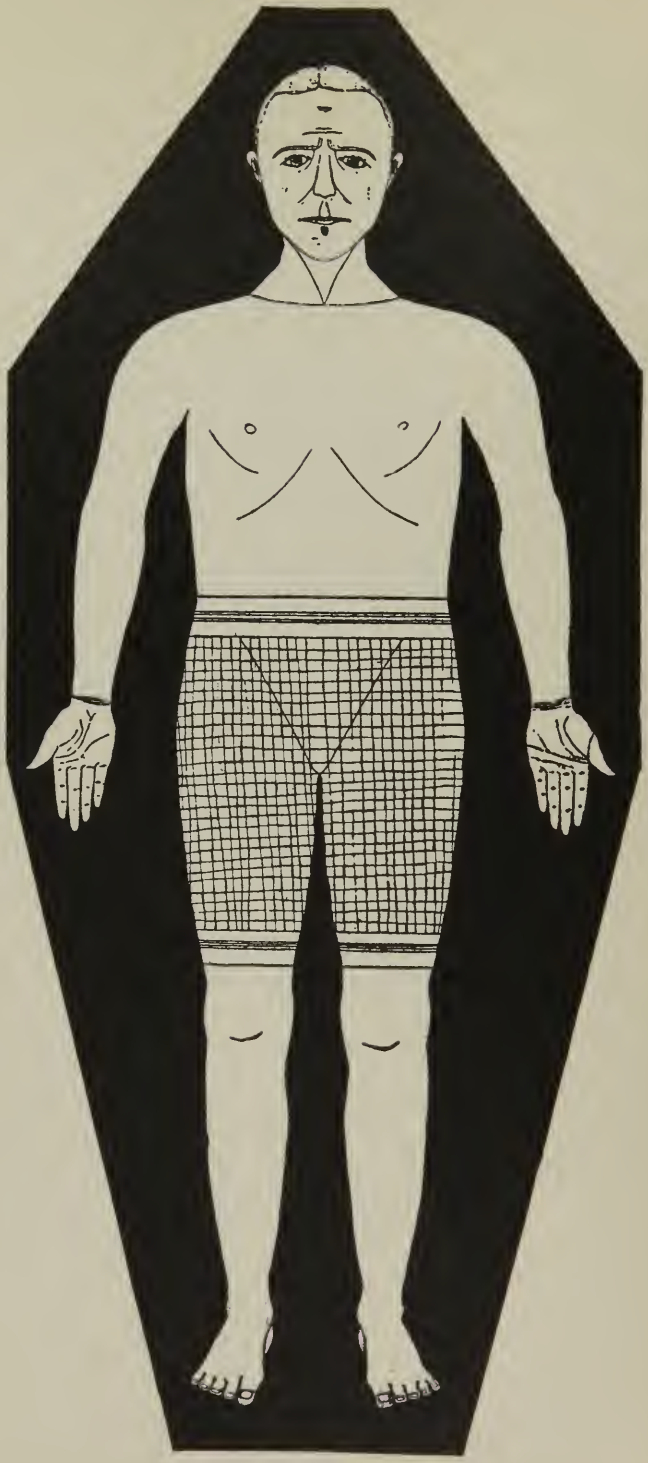

Plate E

THE MENTAL AFFIRMATIVE NATURE

The Fifth Division of the Human Scale

CHAPTER IX.

The Mental Affirmative Nature

The Fifth Division of the Human Scale

The fifth Division of Natures deals with the Mental Affirmative, or people having the balance between the muscular and the brain power in favor of the brain power or mentality to such an extent that the mental influence strikes deeply into the character of the person, and the physical self is overruled by the mental inclinations to a greater extent than the first, second, third or fourth divisions. This increased efficiency of mental phenomena establishes the trend of the traits, characteristics and temperament of this nature, and causes an imaginative soul; always yearning for knowledge, a deep thinker, the student and the scientist.

The nervous system now begins to demand attention for while the mental organs of this nature have increased in size and efficiency, the muscular structure has again sacrificed in sturdiness and power and it becomes possible for the mind to over-strain the vitality of the body, which results in the commonly called "nervous breakdown." This is of rather rare occurrence, however, for in normal life, free from excessive worries, the Mental Affirmative nature has sufficient vitality to perform important daily duties, year after year. The nature is very sensitive, however, and easily purturbed; and the nervous system being under tension of hard mental strain is more subject to shock and external influences, that account for the possibility of over-taxed nerves, and the still more serious complications and illness that cause the over-throw of muscular strength and the "breakdown."

This highly developed nervous system is the product of mental energy and therefore betokens activity of mind and the subjugation of the muscular energy; thus creating the mental machine of high velocity and perfection of movement; the factory of thoughts, and imagery, perception, and observation.

It will be found that scientific discovery, while predominantly an intellectual process, varies with the nature of the phenomena of the different sciences and the individual mental differences of the discoverers.

Philosophy of scientific discovery must be the subject of prolonged investigation, but some data is available. One great mathematician, Poincare, attributes his discoveries to intuition. The essential idea comes with a sense of *illumination.* It is characterized by suddenness, conciseness, and immediate certainty. It may come unheralded, as he is crossing the street, walking through the woodlands or stepping from a car. There may have intervened a considerable period of time free from *conscious* effort on the special question involved in the discovery. Poincare is disposed to account for sudden solutions of theoretical perplexities, on the assumption of long periods of *previous unconscious work.* The author has experienced similar suddenness of perception, in other subjects, and under comparative circumstances, in so much, that he has studied the influences prior to such intuition, or sense of illumination and advances the hypothesis that the Spiritual Influence on the Brain continues along certain *definite lines of purpose,* even after the mental phenomena has *failed* to produce the idea.

At the moment the inventor obtains the solution of the problem his mind may seem to be least engaged with it. The long sought for solution to his scheme comes like an inspiration; an idea freely imparted rather than voluntarily acquired. No mental processes such as possessed by the Mental Affirmative and Ultra Mental Natures are more worthy to command respect; but it may lie beyond the possibility of explanation.

Many men of genius have intuitive records, however, like ethical insight, or Spiritual Illumination, the scientific idea comes to those who have *striven* for it. The door may open after you have ceased to knock, or the response come when you have forgotten that you sent in a "call"; but the discovery comes only after conscious work. The whole his-

tory of science shows that it is to the worker that *inspiration* comes, and that new ideas develop from *old ideas*. Mental work develops the brain, so that the Spiritual Influence has a more far-reaching effect and this in turn stimulates the power of the mind.

In observations concerning the imagination, intuition and memory for details made by the author while a student at L'Ecole Nationale des Beaux Arts, Paris, France, it was ascertained that students of the highest rating in this, the most advanced college of art of the world, were without exception serious minded, hard workers, who had developed their talents through close application to the best methods of study and mind culture.

The Mental Affirmative Nature has by virtue of biological structure, the brain of good conformation, size and proportions; activity and susceptibility to the Spiritual Influence, therefore, this nature is possessed of intellectual powers that produce men and women of genius, and continually stimulates the proneness for diligent research and concentration.

Turn to Plate E, and note the typical figure of this fifth division of the human scale. The bone structure smaller and of less rigidity, the muscles thinner and weaker, fine hair and soft skin, refined features, clear cut and of delicate proportions; broad high forehead, and well developed cranium set high above the ears, with more than two-thirds of the head appearing in front of the ears. Brilliant eyes of intensity. Prominent nose usually of the Grecian type, but sometimes slightly convex at ridge, wrinkled forehead of serious thought and nervous flexibility. Palms of hands deeply lined; long slender fingers, straight cut and without muscular development. Thin lips, closed tightly; straight mouth and thin ears. Chin small and of feminine outline, implying lack of forcibleness, and sloping jaws. Shoulders thin and without muscular accentuation, often sloping; tall, slender neck. Slight arms, small wrists and legs, but fairly good sized feet. The entire physique slender and lean, denoting lack of muscular

power, while the head is large in proportion and the brain occupies a generous space that implies the Mental Affirmative intellect, and the excess of balance over the muscular system.

Again compare all natures with this figure and especially the foreheads and general proportions of the different physiques. For decided contrast observe the Ultra-Physical and Physical Muscular Natures and note the difference in all proportions.

INCLINATIONS:—The Mental Affirmative Nature is highly intellectual; this betokens the student, and at once we associate good books and good literature with one of this nature. The ever-attendant love of knowledge leads into the paths of deep study and intense thought. This field is the harvest of scientific research, which so often occupies this nature and out of the close application to theoretical studies arises the imaginative faculties.

A serious nature, fond of grappling with difficult problems, but not practical enough to care for the actual execution of proven laws, leaving the minor details of mechanical development to others and being contented with the theoretical solution. A striking example is that of the great American Scientist, Prof. Samuel Pierpont Langley, discoverer of the relations of speed and angle of inclination to the lifting power of surfaces when moving in the air. The great theory upon which the aeroplane was builded. But it was eight years after his death until the mechanical details were perfected that made it possible to fly through the air. This great scientist said:—"I have brought to a close the portion of the work which seemed to be especially mine, the demonstration of the practicability of mechanical flight. The great universal highway, overhead, is now soon to be opened."—And here he wished to rest; the normal tendency of the scientist. However, he was persuaded by the war department to attempt the construction of two aeroplanes, and the sad experiences followed wherein he could prove only the feasibility of his theory, but failed

to achieve the mechanical perfection that made flying possible.

He died while criticism of his "folly" was being showered upon him. Eight years after his death the same aeroplanes then spoken of as "Langley's Folly" were improved but slightly in practical mechanical perfection and soared gracefully through the air. The Italian aviator Bleriot, meanwhile, had borrowed Langley's theory and successfully flew, and it was left finally to Glen H. Curtiss to prove that the planes designed by the great scientist could fly.

The scientific mind and the practical mind are far different in natural inclinations and ability. In the Mental Affirmative we have the tendency toward the scientific; however, not to the extent of the idealistic, non-productive dreamer. Results are desired by the nature and oftimes this class of intellect performs fair work in the field of detailed perfection; but usually only under stress of enthusiasm for realization of a practical demonstration, as in the case of Prof. Langley.

Refinement is a pronounced trait of the Mental Affirmative, even possessed by poorly educated persons of this nature. This leads to an unaggressive disposition, serious and genteel; however, the "high mind" is inclined to high ambitions and dignity, which often produces the undemocratic nature, and gives advent to the aristocrat; frequently more from natural tendencies than pure intention; hence, the Mental Affirmative is the *born aristocrat,* while the other natures must assume this trait.

Good clothes, smartly cut and up to the latest styles, neat, graceful and of becoming colors are pleasing to this nature.

Great actors are usually of the Mental Affirmative as memory and delicacy of interpretation of thoughts and actions contribute to success on the stage. The actor, Edwin Booth, greatest American Shakespearian interpreter, comes closely into the field of this pure division of nature; many other great stage artists are found in this field.

The Mental Affirmative Nature is not as much inclined to hand artistry as to literature. It appears that this intellect lacks the practical mechanical ability to portray thoughts on the canvass. For them the power of expression is more easily commanded through the written and spoken word; therefore, you will find more literary persons among this nature, while the successful hand artist is a combination of the Mental Affirmative and the Mental Muscular, adding the practical and the imaginative inclinations. Muscular power is not sufficiently possessed to make oratory easy, and again the same combination proves of the greatest benefit; however, singular successes are observed.

This Division of the human scale can be characterized as "formal", for in daily life it is observed that the high-minded are proud, and pride leads to prudery, coyness and formal precision. They select their friends with grave discrimination and deliberation, and the friendship is conducted with due courtesy and formality; therefore, the "cold of heart" is often attributed to the dwellers in this field of nature; but here again the common opinion is at variance with truth, as this Spirit is sensitive, serious and kindly, but *select;* and it finds solace only in others of high-minded tendencies. Cordiality, sincerity and graciousness means to them as much and more as enthusiastic outbursts of affection mean to others; therefore, it is simply a different mental interpretation, and realization. Generosity is perhaps practiced to a less extent, as the nature is proud and its associates quite the same; hence, the borrowing habit is unpopular among them, through pride; and independence does not foster the "accepting" habit.

Socially the nature is lavish in the manner of entertainment of friends, and absolute extravagance can be observed in the manner of living and dressing. "While the Musculars save, the Mentals spend"—Then how do the Mentals have any money? The answer is, brain work pays more than muscular, and high positions are made by high minds, and the combination of Muscular and Mental Na-

tures all up and down the Human Scale distinctly prove that the percentage of mentality possessed versus bone and muscles, throws the balance one way or the other, measuring the earning power of that nature. For all great men had to be students at some time in life, either in or out of school and there is no possibility of becoming a student without *mentality.*

The Mental Affirmative is not easily entertained; sports of light recreation, billiards and chess are enjoyed, when the setting is *just* right. The theatre must be cozy, and the play smartly acted. Music is loved but it must be flawless and of quality. The problem of the play must have depth; or if musical comedy, grace and charm. The home must have beauty and comfort, and the library possessed of the best authors' works.

The dainty physique likes dainty food; hence, the "cuisine de luxe." Salads, dressings, fruits, tender cuts of meat and fancy pastry, are all pleasing to this division; while plain food but lots of it, is demanded by the Musculars.

The Mental Affirmative is not so domestically inclined as the Physical or Muscular Natures, as observable among bachelors and their clubs. Travel and interesting observation is of paramount interest, while family responsibilities are not so readily assumed; however, after marriage the nature is found to be agreeable, interesting, and painstaking in the home, where the natural pride is demonstrated in both furnishings and surroundings. Socially it is a place of brilliant friends, where cordiality reigns.

This Division is attracted more to the professions than business vocations. The business man needs an aggressive, industrious disposition, with a keen insight regarding commercial details that build up his business; while the Mental Affirmative Nature is studious, dignified and unaggressive. Therefore, they find the professional callings more adaptable to their traits. Also the profession affords opportunity for scientific research, and constant study of a highly specialized nature; all of which is acceptable and interesting to them.

When the nature ventures into business it is usually of a specialized kind that requires considerable skill and thought in conducting it. The financial lines are well represented; also the printing and publishing business, and the manufacture of scientific products.

CHIEF ASSETS:—The strong points of the nature are intuitive imagination, perception, theoretical exploitation, and scientific accomplishment. The creator of ideas, and efficiency expert, professional inclinations and depth of mental reasoning. The studious nature that does the thinking for many others.

TO PLEASE:—Be conservative, not boastful, calm and collected, formal in address and conversation; polite and courteous; confident and self respecting. If possible, be brilliant and thorough in your explanation and answers to questions. By all means be considerate of this nature and act with a sense of appreciation of the dignity possessed.

Do not become too familiar, especially upon short acquaintance. Be diplomatic and maintain sufficient reserve to assure yourself independence and conviction at all times, but gracious enough to firmly establish your kindly attitude and intent.

The Mental Affirmative Nature is the greatest problem to most salesmen and others who have business or social contact with them.

Hotel proprietors agree that the Nature is most genteel and responsive but so often veiled in an atmosphere of estrangement and self contentment.

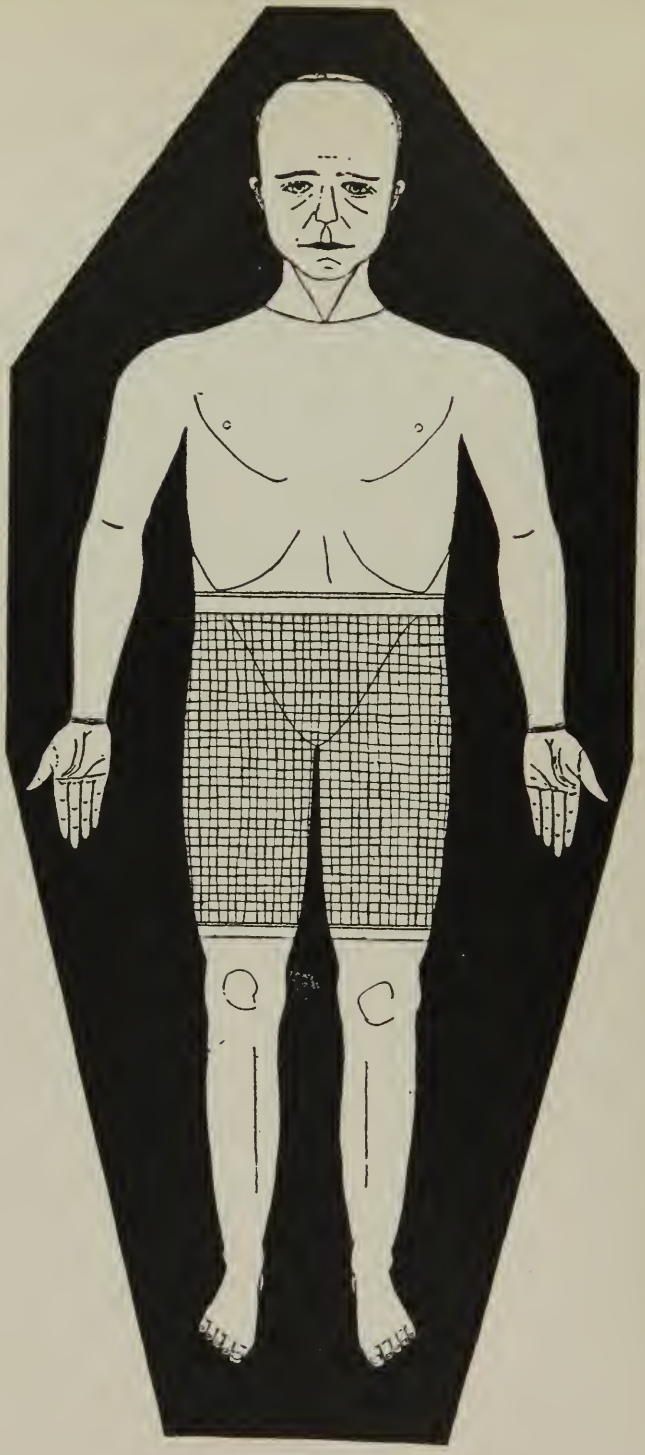

Plate F

THE ULTRA-MENTAL NATURE

The Sixth Division of The Human Scale

CHAPTER X.

The Ultra-Mental Nature

The Sixth Division of The Human Scale

The sixth Division of Nature deals with the Ultra-Mental, or people whose brain structure and mental power so completely over-balances the muscular power, as to give the mind complete domination over the energy and vitality of the body. This produces a nature that is inclined to use practically all the muscular energy for the work of the brain; demanding the sedentary life and occupying the large brain with continuous idealistic tendencies of the mind; while living a life of imaginative dreams. "The Bookish Bookworm" and "The Dreamer of Dreams." The life that is lived in a wholly mental atmosphere with no interest or inclination toward muscular pursuits.

The physique is primarily proportioned and biologically constructed as to become a mental organization; so pronounced that no tendencies are possessed except those that naturally accompany the mental outlook.

Consider Plate F, and note especially the huge high, broad forehead, and cranium; also the height of cranium above the ears. From lateral view the ears are located so that nearly five sixths of the head is in front of them; denoting the super-abundant balance of the mental over muscular power. The skin is soft and fine, so that wrinkles do not show as prominently upon the forehead; however, the highly nervous system is possessed to a more pronounced degree than any other nature; and the physique is ordinarily under severe nervous strain. The hair is soft and silky and complexion usually rather bleached and devoid of color, except under excitement. Note the tall neck sloping shoulders, small arms, and graceful, delicate hands, well lined from nervous gripping. The slender trunk, small legs and feet, all lacking in muscular development. Small delicate features, medium to large eyes, Grecian or Retrousse nose and small mouth with thin lips, straight and closed. The pronounced feminine chin, sloping jaws.

The physique is inclined to be short, and small in all proportions, but supporting a large head, and enormous brain structure.

Compare this head with all other Natures and especially with the Physical and Muscular Divisions. Note the balance of proportion between the brain or cranium structure of the different Natures, and the Ultra-Mental, and then observe the features.

For general average, the lower portion of the face of the Ultra-Mental is inclined to be more pointed, and the cheeks less full and rounding than shown in Plate F; however, in health, the plump face is observed. It is quite infrequent that this nature is found to be in especially good, robust health, as the muscular energy is excessively used and the vitality of the body exhausted through mental activity and nervous strain. The entire muscular system is of weak structure, and the small bones betoken a frail framework, upon which to build. It is therefore quite possible to over-strain this delicate constitution and bring about ill health. This condition so thoroughly obtains that the nature becomes reticent in strenuous activity and is satisfied to take life very moderate; except for the constant inclination to be hovering over a book or working out a hypothesis, pet scheme, or imaginative idea.

In this Nature we have the most powerful imaginative ability, but it is greatly discounted through the absolute lack of practical reasoning, as possessed by the Muscular Divisions. Therefore, it is not so productive of results as the Mental Muscular or Mental Affirmative Divisions. Lack of muscular energy gives to the Ultra-Mental the inactive, dreamy disposition that oftimes results in lethargy, so that industry and productivity are indifferent.

INCLINATIONS:—The library is a place of great interest to this nature. Books of science, history, and arts are in demand, and hour after hour is thoroughly enjoyed pursuing the depths of thought and knowledge found therein.

Love of planning that comes from vivid imagination, leading into day-dreams, is as natural for this nature as ordinary thinking is for others. Always giving consideration to great possibilities and ever recurring in contemplation of probabilities and potentialities. Always meditating and cogitating over generalities, but seldom getting down to detail and a practical solution; in fact, more often living in a fanciful state of imagination than in logical theories. This is the visionary "air castle builder", or the thinker who oftimes thinks for pastime, and rambles over useless mental paths and through dense mists of the imagination.

Credit must be given, however, to this Nature for the everlasting persistence and desire to create some new thought or idea; and oftimes great theories are advanced, in the primary state, by intense application and research; and when placed in the hands of others more practical are developed into useful inventions of countless value to humanity. Oftimes the nature is meditating and cogitating upon things far in advance of the "times" and for this reason little or no interest can be aroused, among others, over some "seemingly absurd idea." The author and playwright comes in this field of nature, as also the reformer. Sir Walter Scott, the historical novelist, and many other well known personages were found in this division.

Business is both annoying and uninteresting to this Nature; for like the Mental Affirmative, practicality is not possessed and therefore business is a hazardous venture and success difficult to attain. So little inclination to produce practical results obtains, that this Division is often very poor and placed in dire circumstances of need and poverty. This reason usually accounts for the occasional presence of Ultra-Mentals among crooks. And when the nature turns to lawlessness and dishonesty, there develops a clever operator in the "under world." Police records of great cities give proof of the fact that some of the most subtle, crafty and treacherous criminals have been of this nature.

Dissipation and over-eating is not a tendency, for the Ultra-Mental eats sparingly and is not the victim of physical craving, the mental power being so much stronger that the body is held in subjugation to the mentality. The small stomach and delicate digestive organs must be treated with care, if health is enjoyed; all of which influences this Nature to be ever moderate, restrained and not over indulgent. Light foods, fruits and delicacies are preferred.

Brain work is more wearing on the strength and vitality of the body than muscular work, and as this Division of the Human Scale is prone to continual mental application, age is acquired in advance of years, and the "old" young person is typical of this nature. The nervous tension and muscular subjugation causes little freedom of action, and the short, jerky steps, and stiffness of joints betoken this fact.

As to interest in the world, this Nature is most enthusiastic. Everything worth while is a source of curiosity. The "whys" and "wherefores" must be ascertained, and added to the great accumulation of knowledge already in store.

Love of classic music, serious drama and dry humor is possessed. In fact this Nature alone can claim an innate appreciation of the classical combinations of musical tones, while all others must acquire this taste. The classical writers and leaders in prose and poetry are always popular with the Ultra-Mental.

Environment does not affect this Nature as it does the other Divisions, for what one sees in their "mind's eye" is far and away from normal surroundings, and this Ultra-Mental Nature lives in the mental rather than the physical self. The home may be very plain, and scantily furnished, but the book shelves will be generously filled. Financial responsibilities are assumed only under special circumstances and as the simple mode of life really obtains, the wants are but modest and the nature is enabled to do with little money.

Clothes are only a necessary evil to this Mental Nature as little attention is given to them. Just enough to wear and be respectable is all required; and as money is seldom an object, little is earned and new clothes are few and far apart.

However, when the fitness of things demands, appropriate or formal attire will be donned and worn with ease and grace, as the modesty of the nature will not permit of impropriety.

This Nature is apt to have few friends but they are "close" and usually of the mental field; for ignorant persons cannot be tolerated, as ignorance is opposed to new ideas and thus defeats progress. Friends with vivid imagination and readily responsive to new and advanced thoughts, literary and enthusiastic in things of scientific interest are most appreciated. While not socially inclined, still a chosen few are ever welcome around the hearth.

Some students have said that Ultra-Mental people are "queer." This opinion arises through the fact that rare things are strange things, and oftimes misinterpreted as queer things. The per-centage of pure Ultra-Mental personages in the world is less than one per-cent, or about one to each 110 persons which makes them comparatively rare, and therefore it is quite human like that they may be called "queer."

It is a mistaken point of view, however, as the nature is a most logical development of the mental domination of the body; for there is always a strife between muscular and mental power; and the mind *delights* to win the battle so decisively that it can play in the clouds of its own inclinations. The world has use for every degree of mentality. All are specialists in certain things and the Ultra-Mental is a genius in *imagination.*

ASSETS:—Originality, perception and scientific imagination.

TO PLEASE:—Be modest, unaggressive, responsive, enthusiastic along scientific lines. Be serious, and sincere

and let your humor be dry and your conversation well saturated with depth of thought and creative, or imaginative interest.

CHAPTER XI.

Combined Natures

The Six Divisions of the Human Scale have now been explained in detail and the leading tendencies analyzed. The student should know the fundamental inclinations and reasons therefore of each nature and learn to picture the typical pure divisions in mind and at once connect the special traits and characteristics with them. This is a foundation upon which to build your power of human analysis, and before attempting to study the finer details that are discussed under Physiognomy, Phrenology and Pathognomy, the Human Scale should be thoroughly mastered and applied in an analogous manner with feature reading; as nature greatly influences the marked traits that are depicted by individual features.

The student must again consider that all Divisions of the Human Scale are isolated pure Natures. They have been segregated, in an abstract sense, for the express purpose of forming a logical foundation upon which to determine the physical, muscular and mental tendencies and to observe in a comparative way.

Combinations of Natures in one person are far more prevalent than the pure Nature and it now becomes necessary for the student to begin to practice transposition of parts of one Nature for parts of another. For instance, it is perfectly possible for the Physical Muscular Nature and the Mental Affirmative Nature, to be combined in one person, thereby causing the heavy muscular body to be connected with the mental head. Col. Theodore Roosevelt was almost a pure Mental Muscular Nature; while Abraham Lincoln was a combination of the Muscular Mental and Mental Affirmative Natures, and John D. Rockefeller a

combination of the Mental Muscular and Mental Affirmative Natures. The military genius Napoleon Bonaparte was a Mental Muscular, and the composer Ludwig Von Beethoven was a combination of the Mental Muscular and Mental Affirmative. The poet William Wordsworth was almost a pure Mental Affirmative; while Sir Walter Scott was an Ultra-Mental, and Hon. William Howard Taft a combination of Ultra-Physical, Mental-Muscular and Mental Affirmative Natures.

When two or more natures are signified in a person, by virtue of the mental cranium on a physical or muscular body, or the muscular head on the mental body, the student must arrive at a proportion of one to the other and determine which nature is predominant and therefore the traits that will be most pronounced and others that will obtain to a lesser degree, through the combination of the other Nature or Natures. Observation among acquaintances will help to develop ability in reading combined natures, as practice makes perfect.

Class attendance and personal instruction is very valuable for combination reading, and should be taken advantage of, if possible.

To analyze properly, the student must first become proficient in arriving at the proper relative balance of any one Nature found in the person, to that of any other Nature or Natures that might be observed.

The eye must first be trained, through study of the biological figures (Plates A-B-C-D-E and F) to instantly recognize the Ultra-Physical, Physical Muscular, Muscular Mental, Mental Muscular, Mental Affirmative and Ultra-Mental physique—first the body separate from the head, then the head separate from the body—and also the size of the cranium in proportion to the face.

After this ability is possessed it becomes easy to immediately recognize the Muscular Mental body even if the head is Mental Affirmative, or to observe the Ultra-Mental head, even though the body may be Mental Muscular, and also any other combinations that may occur.

As an extreme example let us assume that Mr. Q. has an Ultra-Mental head and a Physical Muscular body. You know the traits and characteristics of both Natures. You must, therefore, add up the good traits of each and find wherein they modify one another, also the weaknesses in the same manner. The Ultra-Physical head is imaginative and not practical, while the Physical Muscular body signifies the practical Nature; therefore, Mr. Q. will be more practical than the pure Ultra-Mental Nature and very much more intellectual than the pure Physical Muscular Nature. Other comparisons can be made in like manner. Practice leads to better judgment of the influence of one nature in combination with another.

The following per-centages of brain efficiency based upon 100 points as perfect can be allowed to the different Natures in forming comparisons. Ultra-Physical, 30%—Physical Muscular, 35%—Muscular Mental, 40%—Mental Muscular, 70%—Mental Affirmative, 75%—Ultra-Mental, 80%.

The following per-centages of Muscular efficiency can also be assumed—Ultra-Physical, 35%—Physical Muscular, 70%—Muscular Mental, 75%—Mental Muscular, 65%—Mental Affirmative, 50%—Ultra-Mental, 40%.

Physiognomical Illustrations

PLATE No. 1

Heads and Foreheads

CHAPTER XII.

PHYSIOGNOMY

The science of discerning the character of the mind from the features of the face; or the art of discovering the predominant temper, or other characteristic qualities of the mind, by the form of the body, and especially by the external signs of the countenance, or the combination of the features.—Bacon.

The Human Head

The head is a great executive organization controlling many systems. Its main office is the Brain and the chief rulers there are the Spirit and the Mind.

Expressed in the features of the head and face is that abstract noun called *personality,* and argument among enlightened people is unnecessary for the acceptance of this fact. Without special study and the acquisition of certain knowledge, however, it is impossible for one to read more than a small fraction of the many traits, characteristics and moods expressed. Here we have *Physiognomy.*

The *cranium* or topmost part of the head is a bony covering to house and protect the brain. It grows from childhood to maturity, taking such form and size as the brain within requires. The average person can, to a limited extent, realize a sense of appreciation of proportions and unconsciously feel the impression of intellectual power in some heads, and lack of it in others. Without the acquisition of special knowledge, however, it is impossible for one to obtain more than a slight idea of the intellectual powers possessed or the kind of nature under observation. Here we have the subject of *Phrenology.*

The *human physique* is the entire human machine that does the bidding of the brain and is, for example, the army of servants that carry out the orders given from headquarters. Now this machine is either stronger than the intellectual powers, or the intellectual powers will predominate. This relationship is hardly discernable by the lay mind, without special knowledge. It is the balance

between the muscular powers and brain powers, and this determines the kind of basic nature you have to deal with. The sum total of all the above knowledge is necessary to correctly read the Spirit. Here we have *Humanology*.

Expressions of the facial features, caused through the manipulation of the muscular system by the brain-power, records the thoughts of the mind, and is a group of symbols illustrative of the character of thoughts eminating from the Spirit. Therefore, thoughts have much to do with the personality that radiates from the head and face and gives proof of the fact that *"As you think, you are."*

The face reveals action and the traces of one's customs are stamped thereon. The head delineates mental equipment; therefore, the uses this equipment is put to are mirrored on the face. From a general standpoint persons with broad craniums are broad-minded; with narrow-craniums are narrow-minded; with high craniums are high-minded, and with low craniums are low-minded.

CLASSIFICATION OF THE HEAD:—Considered from general size, shape and all proportions, the following simple classification of heads can be made—

1—**BROAD** (across forehead) 2—**LOW** (above ears) 3—**HIGH** (above ears) 4—**NARROW** (between ears) 5—**SHORT** (from front to back) 6—**LONG** (from front to back).

NOTE:—Heads in this chapter will only be discussed from the standpoints of size, shape, profiles and contours. The reasons for the findings are fully set forth in chapter on the brain.

BROAD HEADS:—This type of head bespeaks a brain that is full and powerful in the districts of reasoning and comprehension; and a fair degree of memorizing power. It is the head of good judgment, as it is reason that perfects judgment. It is predominant over the muscular system in most cases, and is possessed by the Mental Muscular, Mental Affirmative and Ultra Mental

Natures. It is the head of wit and humor, as keen reasoning powers are required for this trait. It evidences an active mind and one of originality. It is the head of imagination, creation and initiative.

Breadth of Posterior Areas of the head and contraction of the Anterior, gives evidence of a weakly balanced brain, poor judgment, little self-control and unreliability. Quality and activity of the mind as well as nature and intellectual development are all requisites to good judgment, and it is therefore not intended that the student should consider all broad heads have good judgment or that all narrow heads have poor judgment. The system of averages, however, is conclusive that most broad-headed persons have sound judgment.

A broad, low brain is usually inclined to the mechanical, in a small way, such as working on simple machinery in the duties of assembling or repairing, but seldom in the field of inventor or master mechanic.

The hoarding instinct prevails, especially in the continual acquisition of worldly goods.

The general breadth of the head should also be considered in connection with the proportion of the skull, in breadth from the extreme lateral sides of the eye sockets and across the temples; as fullness and breadth in these districts evidences constructive ability and soundness of reasoning. It is the head of the professional man of success, and the commercial business man.

Energy and activity depends upon natures to a large extent; therefore, the student must always consider the nature of a person in close conjunction with the head formation.

LOW HEADS:—When the top of the cranium is low above the ears, we have the low, flat brain. If this head is broad, reasoning power is fairly good, but memory deficient. If decidedly low, it suggests inferior brain power. If both lowness and narrowness obtain then deficient mentality follows, as there is insufficient brain substance.

The very low head possesses the least talent and is found only in the extreme lower classes of society and among imbeciles. It is of the Physical Nature.

HIGH HEADS above ears:—Individuals who are serious-minded, pessimistic, unappreciative of wit and humor, are naturally possessed of lofty narrow craniums with features long, thin and pointed. This type of head denotes superior memory and conscientiousness, but is lacking in shrewdness, forcibleness, practicability, originality and initiative.

Heads prominent Anteriorly manifest love of poetry, book knowledge, religious sentiment, benevolence, oratorical talent, aptness for details and morality. The tendencies regarding books and religion being dependent upon whether the Anterior Districts are broad or narrow. In the former case scientific books that require reasoning capacity are preferred, and with prominent perceptives and a Mental Muscular Nature, energy, originality, productiveness and individuality are found. In the latter case literary books are preferred and the knowledge obtained through memory is more thoroughly acquired.

THE HIGH, NARROW HEAD signifies high ideals and religious perception, while analytical ability is deficient. If the posterior area of the cranium is especially lofty and the Anterior portion low, then firmness, conceit, narrow-mindedness, failure of conscientiousness and benevolence is indicated. If the cranium is high Anteriorly and low Posteriorly, then the above traits will be reversed, except self-reliance would not be strong. The high head is of the Mental Affirmative and Ultra-Mental Natures.

NARROW HEADS (between ears)—Heads narrow between ears should always be carefully considered with regard to the other proportions, for by heedful observation both strength and weakness of mentality may be in evidence, from Anterior and Posterior proportions. The average narrow head bespeaks activity, timidity and submissiveness. If possessed of a Muscular as well as a Mental Nature, energy and activity will be present.

Memory and capacity for details fair, and oratorical power is possible.

Narrow heads between ears (if of fair height Anteriorly and Posteriorly) are of the Mental and Muscular natures, and if low are of the Physical Nature.

SHORT HEADS (from front to back):—If also high and narrow, love of poetry, high ideals, religious sentiment, memory and imagination are prevalent. Reasoning, initiative and constructive ability will be deficient. If the head is short and broad, then we have willfulness, decision, love; also acquisitive, aggressive, secretive tendencies and caution; reasoning, constructive and analytical ability will be possessed. The Mental Muscular Nature predominates.

LONG HEADS (from front to back):—Do not indicate forceful traits, and therefore lack of aggression, meekness and kindness of disposition is evident and memory is good. If narrowness of the head and broadness of the jaws obtain then an obstinate, unreasoning temperament exists.

Long Heads that protrude, Posteriorly (at the back) indicate the following:—A yearning for knowledge, memory, enduring affection. Prominence of the superciliary ridge (above the eyes) indicates force and initiative, as an adjunct to the long head. This is of the Mental Affirmative Nature.

CHAPTER XIII.

The Forehead

The forehead comprises the Anterior area of the head, covering highly important districts, and as the growth and development of the brain determines the size and shape of the forehead, it becomes evident that this significant area is of paramount moment in establishing the degree of mentality possessed.

For centuries gradual progress in civilization and the development of higher ideas, that come with acquisition of knowledge, has changed the outlines of the human forehead. The frontal areas have become more prominent and lofty; while low, narrow and abrupt receding foreheads are gradually falling among the ancient relics left in the wake of human advancement.

Classification of Foreheads

Foreheads can be classified as follows:—BROAD — NARROW — HIGH — LOW — SMOOTH — WRINKLED — PROMINENT ANTERIOR UPPER FOREHEAD — PROMINENT ANTERIOR CENTRAL FOREHEAD — PROMINENT ANTERIOR LOWER FOREHEAD.

BROAD FOREHEADS:—When the Anterior districts are broad the brain is broad and if the superciliary ridge (district No. 1—Plate No. 6) is eminent, and the jaws also broad, then creative ability, imagination, originality, caution, perseverance, practicability, acquisitiveness, secretiveness and executive ability will be present. The prominent superciliary ridge denotes a perceptive forehead; this creates brows and brings them forward and causes the deep-set eye (Fig. 1, Plate 1). When the forehead is not prominent at the superciliary ridge together with narrowness of jaws, then the above traits will not be so predominating and memory will be prevalent. If fullness in the areas of district Nos. 2 and 3 (Plate 6) is evident, we have the reflective forehead. Loftiness of brain signifies

power of reason and clear judgment, if general breadth of head, face and features is pronounced. This is of the Mental Muscular, Mental Affirmative and Ultra Mental Natures.

NARROW FOREHEADS:—Lofty, narrow foreheads (Fig. 12, Plate 1), portray an aptness for details and superior memory; while deficiency in creative and imaginative power prevails. If the perceptive district (No. 1, Plate 6) is prominent, activity of mind prevails. This is of the Mental Natures. A memorizing brain is not conducive to individuality and radiance of personality. A narrow forehead (Fig. 12, Plate 5) evidences a brain of like proportion and this is not favorable to the production of ideas, and consequently to good judgment, as reasoning power is limited. Lack of courage, firmness, and thoughtfulness and oftimes over haste and rashness are possessed. This is of the Physical and Muscular Natures. Fullness in the superciliary ridge (District No. 1, Plate 6) evidences perception and notable fullness in district Nos. 2 and 3 (Plate 6) signify reflective power.

HIGH FOREHEAD:—Thirst for knowledge predominates; memory, love of literature, beneficience, conscientiousness, honesty, patience, religiousness, constancy in habits and routine, non-combativeness, courtesy, and seriousness are indicated; but creative ability, aggressiveness, and originality are negative. This is the forehead that accumulates knowledge from books, observation, travel and from other people, and stores it in the brain where it is retained for long periods. Practicality, distinctiveness and individuality are not prominent traits, but in their stead refinement and eagerness for learning exists. Deep reasoning is less notable than cogitation and thoughtfulness. The ability to gain knowledge and retain it prevails, but there is a tendency to be undemonstrative, and uncommunicative, in giving knowledge to others, except when the nature is possessed of oratorical ability.

Attention is directed to people who are constantly absorbing literature, and frequent the library and other

places where good reading matter can be procured. A high average of this type of forehead will be noticeable. (Figs. 11 and 12, Plate 1 and Plates E and F) This is of the Mental Affirmative and Ultra-Mental Natures. If the forehead is reflective (prominent in districts 2 and 3, Plate 6) it denotes imagination and "day dreams", making plans that are never executed, a lack of energy and slowness in action of thought and movement. Lacking in self-confidence, but possessed of memory, while deep reasoning capacity is not pronounced, (Fig. 3, Plate 1). This is of the Ultra Mental Nature.

LOW FOREHEADS:—Memory and reason have proportional relationship, and this ratio will usually favor one trait to the detriment of the other. Therefore, if memory is good (Fig. 12, Plate 1) reason is seldom pronounced and vice versa (Fig. 11, Plate 5). If the low forehead is broad then fair reason is denoted; however, if both lowness and narrowness obtain then memory and reason are inadequate; as the quantity of brain substance is deficient in all districts, both frontal and lateral (Plate B) also (Fig. 10, Plate 1). This is of the Ultra-Physical and Physical Muscular Natures.

When broadness and fair height prevail, potent, reasonable, clear mentality is possessed (Fig. 4, Plate 1.) This is of the Mental Muscular Nature. The low, flat, broad forehead is wanting in imagination, benevolence, reverence and comparative powers. Efforts are oftimes misdirected and useless.

SMOOTH FOREHEAD:—When wrinkles and creases are not evident on the forehead a self-seeking nature is denoted. Memory and aptness for routine and imitation is possessed, but lack of executive ability and creative thought prevails. This type of forehead oftimes bespeaks of a contented home-loving nature; however, contracted views and narrowness of mental scope is signified (Fig. 6, Plate 1.) It is found in all six Natures.

WRINKLED FOREHEAD—The intense choleric nature is denoted when wrinkles and creases are evident. Ex-

citability, forcibleness, temper, irritability and nervousness prevail, while energy is pronounced. This is of the Mental Muscular and Mental Affirmative Natures.

PROMINENT ANTERIOR UPPER FOREHEAD:—(Plate 6, Fig. 2, district 3.) Denotes love of music, books and general knowledge. A mind interested in affairs of the day; an aptitude for details, good memory and command of language; also conscientious, religious sentiment, high ideals and reflective power, lack of creative ability, industry, originality and initiative is evidenced.

Talent for the study of philosophy is pronounced; but deficiency for original hypothesis and argument is signified. A pertinacious, resolute, optimistic, hopeful, sanguine nature is indicated. (Fig. 11, Plate 1.) This is of the Mental Affirmative and Ultra-Mental Natures.

PROMINENT ANTERIOR CENTRAL FOREHEAD (Plate 6, Fig. 2, district 2.)—The superciliary ridge (Plate 6, Fig. 2, District 1) is seldom pronounced in this type of forehead and therefore ability for intense reasoning, initiative, and execution is mediocre. Lack of self-reliance follows. It is customary in children, (Plate 1, Fig. 8), before the perceptive powers are developed. In adults memory, love of literature and reflective power is betokened, but individuality and creative ability is wanting. This is of the Muscular Mental Nature. When the forehead is concave or hollow in the Anterior Central District, deficient mentality is signified (Plate 5, Fig. 17). Of the Ultra-Physical Nature.

PROMINENT ANTERIOR LOWER FOREHEAD (Plate 6, Fig. 2, district 1). This is the district of the superciliary ridge, where the faculty of perception exists; and through this power observation and memory becomes a productive source of reason and wisdom. Masculine traits are denoted; quick perception, deep reasoning, creative and imitative ability, firm opinions and general forcibleness of character and aggressiveness is pronounced; prominence in this district forms the heavy brow and deep

set eyes, (Plate 1, Fig. 1). Developed with boys at the age of puberty.

The superciliary ridge is seldom prominent with females, and if so, masculinity and assertiveness together with initiative and executive ability are denoted.

Prominence of the superciliary ridge together with fullness of districts 2 and 3 (Fig. 2, Plate 6) also districts 8, 9, 10 (Fig. 1, Plate 6) with fair height of forehead and broadness of head, gives the most potent and desirable mentality.

The well-balanced forehead indicates genius, reason and a perfect combination of qualities; hence, power of intellect, (Plate 1, Fig. 2.)

The forehead of muscular power, becoming tense and quickly relaxing; gathering into folds, knots and wrinkles, that wear furrows in the skin, evidences a forceful nature; with ability to originate and create, (Plate 1, Fig. 5).

Hollow temples indicate narrowness of comprehension, pessimism, doubt, and is contrary to mentality, (Plate 1, Fig. 7).

Foreheads projecting acutely in the upper two-thirds, bespeak weakness of mind, stupidity and bordering on imbecility, pessimism and lack of comprehension prevails, with deficient mentality. (Plate 1, Fig. 9.)

Physiognomical Illustrations

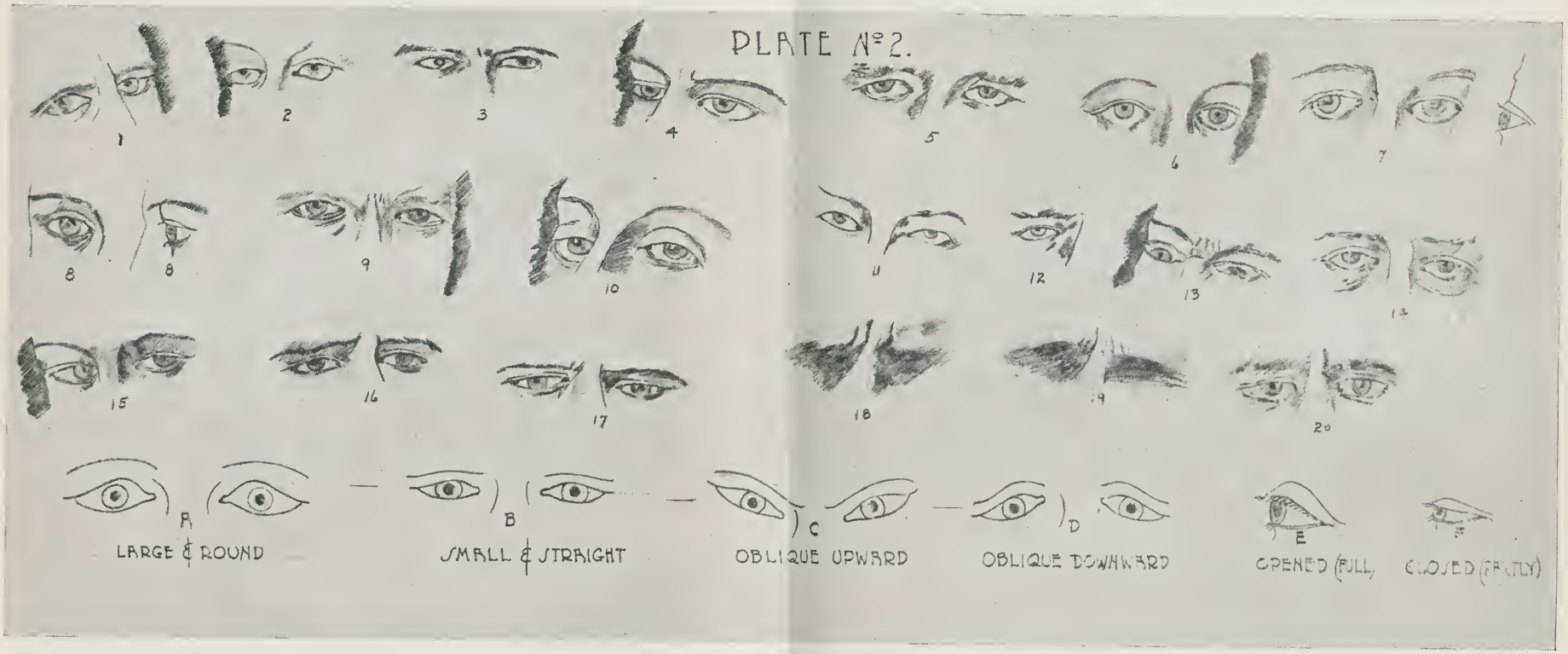

PLATE No. 2

Eyes, Eyebrows and Eyelashes

CHAPTER XIV.

The Eyes, Eyebrows and Eyelashes

Eyes are the windows of the brain, through which we observe the wonders of the world, and of humanity.

This visual apparatus consists of the eyeballs, the optic nerves, and the nerve centers in the brain. The eyes have accessory organs, namely the eyebrows, eyelids, lacrimal apparatus, and muscles of the eyeball.

The eyebrows are two thickened ridges of skin covered with hairs, situated on the upper border of the orbits, and protect the eyes from too vivid light.

The eyelids are two folds projecting from above and below in front of the eyes, covered externally by the skin, and internally by a mucous membrane. Arranged in a double or triple row at the margin of the lids are the eyelashes, those of upper lids being more numerous and larger than those on the lower.

The slit between the edges of the lids is called the palpebral fissure. *It is the size of this fissure which causes the appearance of large and small eyes,* as the size of the lobe itself, varies but little. The eyelids are obviously provided for the protection of the eyes; they are movable shades which by their closure exclude light, particles of dust and other foreign matter.

The *iris* is a colored, fibro-muscular curtain, hanging in front of the lens. In the middle of the iris is a circular hole called the *pupil,* through which light is admitted into the eye chamber.

The iris and the pupil of the eye, with their relative positions to the eyelids, and the position of the eyelids themselves, are great factors that depict the emotions of the Human Spirit.

The eyes are more indicative of feeling than any other features. The gauge where character, mentality and thoughts are registered, and the most uncontrollable of any expressions from the Human Mind.

The eye observes quickly, just a glance and a decision is flashed across the brain, and the muscular system simultaneously moves to carry out the decision. Observe persons entering street cars when there are several vacant seats. The eyes make an instantaneous survey of the compartment, and if one knows how to observe this action, it is usually a simple matter to read the decision made and to determine which seat has been selected.

In governing our movements both in buildings and in streets, just a glance gives us an instant decision to avoid colliding with something.

Expressions are the most interesting manifestations of the eyes, and combined with the other features display secrets of temperamentality, moods and thoughts. Firmness and acquiescence; humor and sorrow; love and hate; hope and despair; sympathy and scorn; calmness, anxiety, stupidity, brilliancy, joy, grief and many other emotions are plainly written therein. This is the language of the eyes and it is a great part of the only language universally understood. It is more reliable than word of mouth and far more suggestive of truths.

Authority is stamped in the autocratic eye and subservience is reflected from the eye of the servant; therefore, social status is revealed by the presence or absence of self-confidence that the eye bespeaks. Virtue, vice, ignorance and education are four great keynotes of character that the eyes cannot conceal.

Classification of Eyes

COLOR — DISTANCE BETWEEN — GENERAL SHAPE — COMPARATIVE SIZE — MOVEMENT OR EXPRESSION

COLOR:—One of the most distinguishable features of the eyes is color. No other part of the human physical structure is so rich and attractive in coloring as that of the eyes. Blond people have nearly clear white eyeballs, while brunettes usually have bluish white. The iris coloring is frequently hereditary. The children of blond par-

ents are likely to have light eyes, while the reverse obtains with children of brunette parents. An intermediate hue usually follows when one parent has light complexion and the other dark.

Dark eyes suggest mediocre originality and initiative. They indicate good memory, love of music and luxury, ability to see color, and judge its effects, and a fondness for brilliant colors. Calm, passive affection; keen sense of taste. Creative ability and imagination good, but executive ability only fair. They are of the Muscular and Mental Natures.

Light eyes and blond coloring denote poor memory, lack of ability to see color, and detect flavors. They betoken creative and executive ability, imagination, originality, initiative and a desire to avoid extremes in color, especially for dress. They are of the Mental and Muscular Natures.

Grey eyes indicate system, calculation, calmness and self-control. They lack the sympathy of the blue and the zeal of the black, and a tendency toward the austere nature. They are of the Mental Nature.

Blue eyes with depth of color and transparency indicate superior qualities of the Spirit, clearness of intellect, sound judgment, good mentality, constancy, devoted affection, shrewdness, originality, energy, reason and constructive ability; but lack of musical tendencies and poor memory is signified. Light blue eyes refer to blond traits while dark blue more often compare with less pronounced brunette traits. Pale blue eyes do not suggest forcibleness of character in comparison with the darker blue colors. They are of the Mental Natures.

Black eyes, so called, are not black, but very dark brown and express calm affection, memory, musical and poetical ability. The extremely brilliant, sparkling black eye is the symbol of aggression and possesses the piercing glance, so commonly used by the villain in the play, while the dull black eyes signify lack of energy and force of character. They are of the Muscular Natures.

Brown eyes are sanguine, with tendencies similar to black, but with less intensity, as the depth of color suggests. Humor, wit and mischief are denoted by the full, open, clear brown eyes with the twinkle (Plate 2, Fig. 10) Reddish brown eyes signify energy, impulsiveness, the choleric nature and force of character. They are of the Muscular Natures.

Green eyes are rare. Deceit and treachery are denoted, while high intellect and pronounced talent, energy and temper obtain. They are of Mental Natures.

Mixed colors are also rare; however, it occasionally occurs that the irises may be different colors. The author has a friend who possesses a brown and a blue eye, while brunette coloring exists in the hair and complexion. Mixed traits are indicated, and calm disposition.

Eyes of *extreme coloring* indicate pronounced traits, while eyes of neutral traits signify competency in general ability, but lack of extreme keenness. Brilliancy and lustre bespeak a sympathetic nature and deeper transparency shows depth of reason and purity of thought. Memory is pronounced, while originality and initiative are negative.

Dull, lustreless eyes of any color betoken the inactive dull nature, and if clouded in appearance, a serious, pessimistic mind. They are of the Physical Natures.

DISTANCE BETWEEN EYES:—Breadth of the brain determines the cranium at all districts; therefore when district 1 (Plate 6) is broad the perceptive brain is broad and when this district is narrow, the eyes are close together. Therefore, breadth between the eyes denotes reason and from reason comes judgment and from judgment comes caution and practicability. Originality, creative ability and a comprehensive view of things in general are indicated, (Plate 2, Fig. 4). When the space between eyes is narrow even if the forehead is broad, negative factors become evident (Plate 2, Fig. 3). Treachery, shyness, lack of reason, narrowness of views, obstinacy, nervousness and a changeable character are betokened. A narrow head necessarily has the eyes

rather close together and under this condition traits that apply to narrow brains are expressed, rather than those above enumerated, unless extreme narrowness obtains. A very favorable distance between the eyes is the width of an eye.

GENERAL SHAPE OF EYES:—In appearance eyes are LARGE and ROUND, SMALL and STRAIGHT, OBLIQUE UPWARD, OBLIQUE DOWNWARD, OPENED (full) or CLOSED (partly). (Plate 2, Figs. A, B, C, D, E. F). *As the difference in the apparent size is due only to the slit between the eyelids,* it is evident that the actual size of the human eye is too uniform for distinction; however, the eye shape, as the slit between the eyelids discloses, is of *paramount* importance in signification.

Round Eyes:—This appearance is given to eyes when the lids open wide apart; showing a goodly portion of the white eyeball and all of the iris; which gives a spherical, prominent appearance. The common expression "large eyes" then obtains. Fullness beneath the round eye as shown in profile (Plate 2, Fig. 8) betokens superior power of expression. Memory, love of music, literature and travel. Lack of executive ability, poor reason and judgment are implied (see large eyes). If brilliant they are of the Mental Natures.

Oblique Eyes:—The oblique downward sloping eyes (Plate 2, Fig. D) are the studious variety. Shrewdness, intense concentration and application, also high mentality and pronounced intelligence are denoted. A pessimistic nature often obtains. The prominent dull eye, beneath an arched eyebrow, with smooth, wide drooping upper lid (Plate 2, Fig. 10) shows weak muscular control, lack of confidence, self-consciousness, a sensitive and imaginative Physical Nature.

Eyes sloping oblique upward are typical, of oriental people. Ability to handle details and pronounced memory follows. When the brows also slant upward from the nose, with fullness in upper lid overhanging the eye, hiding the rim of the lid, (Plate 2, Fig. 1) craftiness, treach-

ery and chicanery are evidenced. They are of the Muscular Natures.

Straight Eyes —Sensibility of reason and moderation are signified when the lids are horizontal (Plate 2, Fig. B and 17) A practical nature with concentration of thought and shrewdness is expressed. They are of the Muscular and Mental Natures.

COMPARATIVE SIZE:—In observing the eye size, both frontal and profile views should be taken. Eyeballs are practically the same size in all adults, therefore size refers only to the visible portion of the eye between the eyelids.

Small Eyes.—When the palpebral fissure or the slit between the eyelids is short, we have the commonly called "small eyes". The scope of vision is lessened by the shortness of the palpebral fissure and therefore the mind becomes more occupied with mental reflection than external impressions and this gives strength to reason, constructive ability and original creation. Pronounced perception and comprehension; power of quick accurate decision, analysis and synthesis; judgment and precision, but mediocre memory. They are of the Mental Natures.

Very Small Eyes indicate a suspicious nature, shrewd, sly, unreliable and deceptive (Plate 2, Fig. 3); while extremely small, piercing eyes evidence malice, spite, quarrelsomeness, treachery, assertiveness, especially if the choleric nature is possessed.

Small Iris denotes cunning, deceitful pre-meditation, also an unreasonable, obstinate, refractory nature (Plate 2, Fig. 11). They are of the Muscular Nature.

The following traits are expressed by small eyes: EAGERNESS — SHREWDNESS — SERIOUSNESS — PLANNING — DETERMINATION — DEBATING — WARY — PRUDENT — OBSERVING — SELFISH — SEIZING — COVETOUS — MISERLY — DEMANDING — PUGNACIOUS — INQUIRING — AGGRESSIVE — SUSPICIOUS — JEALOUS — VINDICTIVE — CRUEL — DECEITFUL — TREACHEROUS — IRRITABLE — REVENGEFUL.

Medium Eyes —Large or small eyes denote pronounced, extreme traits of character, while those of medium size signify a more even balance of the mental equilibrium and reason, fearlessness, wisdom and calm calculation are possessed to a more pronounced degree. Therefore this type of eye is the most desirable. Memory is but fair, (Plate 2, Fig. 15). They are Mental Natures.

Large Eyes:—If one opens the eyes wide and tries to think seriously, considerable difficulty will be experienced, because mental concentration requires a partial closing out of light from the eyes and thereby turns one's vision inward or to the mind. Persons with large, prominent eyes are therefore more observing than reasoning, as it is not natural for them to partly close their eyes and concentrate mentally. Persons with small eyes do not make any effort to do this, as the natural position of their eyelids is favorable to the proper attitude.

Wide open eyes, therefore, denote mediocre reasoning capacity, and a flighty disposition; while memory is pronounced from the enhanced visual power. This stamps the objects observed upon the mind. Ocular rather than aural memory predominates.

Persons with large eyes appear to be almost continually astonished, which is quite characteristic of them. Prominent eyes signify love of literature and eagerness for knowledge; therefore, an inquiring and inquisitive nature. This leads to a fondness for literature.

Lack of caution, however, causes rashness and risk and as large eyes express these traits mistakes often occur. In danger eyes of this variety appear wild, and impulsiveness without reason follows.

Receptive, calm affection of the tolerant nature is denoted, while little enthusiastic, soulful reciprocation is returned. Love is sometimes sought for but it is *poorly* repaid.

Originality and creative ability is lacking, while imitative talent is possessed. Inventors and scientists seldom

possess large eyes. If transparent or brilliant, the Mental Natures are denoted.

The following traits are expressed by large eyes:—MEMORY — IMITATION — CAPACITY FOR DETAILS — LOVE OF MUSIC — NON-CREATIVE — FORGETFUL — FLIGHTY — LACK OF FEELING AND CONCENTRATION — IMPRACTICAL.

EXPRESSION:—Downcast eyes signify self-consciousness, modesty, embarrassment, meekness and humility; shyness, lack of aggression and self-esteem. Expression is largely the effect produced by moving the eyelids and the eyeballs. Without the eyelids, however, this expression would be practically meaningless, as the eyeballs are no more distinctive in expression than glass eyes would be. Expression is most pronounced by the slowness or rapidity of eye movements, thus slow moving eyes indicate a slow moving muscular system and in turn signify a sluggish, phlegmatic nature with slow perception; and oft-times a stupid, cautious, fearful and careful Muscular Nature.

RAPIDLY MOVING EYES are indicative of the choleric temperament and denote pronounced energy, quick perception, and decision; instant responsiveness, nervousness, and excitability. They are of the Mental Natures.

FIRM SET EYES, (Plate 2, Fig. 9) that gaze steadily as if always in deep concentration, and do not shift, but look one straight in the eyes, betokens firm decision, boldness, willfulness, fearlessness and determination. They are of the Muscular Natures.

SUSPICIOUSNESS is the keynote of "looking askance" or shifting the eyes to the extreme right and left; and timidity, shyness, and shrewdness are expressed, (Plate 2, Fig. 3 and 15). Children often have the habit of looking askance; it is a childish trait and usually signifies timidity.

MISCELLANEOUS:—*Puffiness below the eyes,* attending in folds with the lower lid falling away from the

eyeball, showing the red mucous membrane, the upper lid drooping, but the brow held back (Plate 2, Fig. 14) denotes uncontrolled temper, sensual tendencies, and is usually the product of over-indulgence, and dissipation. If the brow is drawn down (Plate 2, Fig. 12), hiding the rim of the upper lid, dissipation of the passion is evidenced.

Mental concentration is indicated by drooping upper eyelids over the pupil, diminishing the vision, and denotes mental research; the muscles of the face are drawn downward (Plate 2, Fig. 16.)

Cold heartedness and cruelty are expressed in the narrow eye with fullness in the upper lid, hiding the rim of the lid; the eyeball drawn downward. When both eyes and brows slope upward irritability and treachery are indicated. (Plate 2, Fig. 3.)

The favorable eye is full, well rounded, deep set; compact eyebrows, and large, sensitive, dilating pupil. The outer corner more deeply set than the inner corner. The brow close to the upper eyelid, which covers about one-fourth of the pupil, denoting concentration. This is the eye of comprehension, and understanding; analysis, synthesis, and intensity of thought and observation. Optimism, reason and keen sensibility (Plate 2, Fig. 1).

Passion is expressed in the deep-set, brilliant eye, of dark coloring. Fullness appears above the upper lid that overhangs the lid itself. The eyeball drawn upward, showing the white of the eye below the iris; the eyebrows heavy and shagged (Plate 2, Fig. 5). Active, quick temper, and irritability and lack of imagination is also denoted. Of the Muscular Natures.

Colorless eyes with small pupils, displaying merely a dot of color, seldom dilating, with fixed gaze, express a narrow, mercenary, frigid nature (Plate 2, Fig. 6).

Prominent eyes set far apart, with brows arching upward from the eyes, small pupil and meaningless expression, with entire rim of upper lid visible, denotes a nature easily imposed upon and gullible. The prominent eye that

in profile is practically on a line with the brow, evidences a delicate, sickly constitution. (Plate 2, Fig. 7).

The drooping eyelid over dull, pale blue eyes, with lack of transparency; thick upper lids and vacant gaze denotes fruitless contemplation, with no thought of realization, and implies the eye of sensuality. The eyes of mentality are clear, deep set, close to the eyebrow, far apart, with full pupil, and of medium size.

Eyebrows

The hairy ridge above the eyes is for further protection to the eyes, and incidentally gives added expression.

Eyebrows are ARCHED — OBLIQUE-UPWARD — OBLIQUE-DOWNWARD — STRAIGHT — IRREGULAR — SHAGGED —COMPACT —THICK and THIN.

Some meet at the root of the nose, while others are wide apart; some are high above the eyes, and others are low.

When they meet, forming one continuous line across the face, calm affection, lack of constructive ability, languor, musical tendencies and brunette traits are signified. Usually associated with dark complexion.

When wide apart the tendencies that apply to eyes of this position apply. (Plate 2, Figure 1).

Oblique-upward denotes optimism, memory and ability to handle details, (Plate 2, Fig. 11).

Oblique-downward signifies discrimination, pessimism, thoughtfulness and a demanding nature, (Plate 2, Fig. 19).

Straight eyebrows denote a practical, imaginative, austere nature.

Irregular shagged eyebrows indicate seriousness, pessimism and absence of cheerful thoughts. (Plate 2, Fig. 18).

Acutely arched eyebrows signify the choleric nature and like wide-open eyes are significant of memory, but lack of originality and reasoning capacity. Nervousness, irritability and temper are expressed.

Thin eyebrows evidence refinement and intellectuality, (Plate 2, Fig. 4), while heavy, thick eyebrows denote rash-

ness, irritability, inventive genius and a strong, vigorous personality.

High eyebrows above the eyes indicate memory, but lack of good judgment, creative and constructive ability. They usually are associated with large, wide open eyes, and traits applying to that variety of eyes are also expressed by high eyebrows. Initiative ability and carrying out of orders rather than planning and scheming are possessed, (Plate 2, Fig. 6).

Very low eyebrows imply a desire to lead, willfulness severity and cold-heartedness. They usually accompany small, piercing eyes. A scheming, pre-meditating, serious, aggressive, uncompromising, austere nature is implied, (Plate 2, Fig. 20) ; all masculine traits are signified. Men of willful thought who have courage of their convictions have heavy eyebrows. Age develops the heavy brows and adds venerableness to the aged.

CHAPTER XV.

The Nose

The lungs constantly require air, so that oxygen can be delivered to the cells of the body; the entrance of the air is through an organ called the nose which has its *root* at the base of the forehead, between the brows and its *base* above the upper lip.

The nose is also the special organ of the sense of smell, as well as a passage way for the entrance of air to the respiratory organs. It consists of two parts—the external feature and the internal cavities, or the nasal fossae.

The external nose is composed of a triangular framework of bone and cartilage, covered by skin and lined by mucous membrane. On its under-surface, or base, are two oval shaped openings—the *nostrils,* which are the external openings of the nasal fossae. The margins of the nortrils are possessed of stiff hairs, which prevent the passage of dust and other foreign matter from being carried into the lungs.

The internal nose, or nasal fossae are two irregularly wedge-shaped cavities, separated from one another by a partition, called the *septum*, the curvature of curved noses takes place where the bony ridge ends and the cartilaginous structure begins.

ADVANTAGES OF NASAL BREATHING:—Under normal conditions breathing should take place through the nose. The arrangement of the bones makes the upper part of the nasal passage very narrow and these are thickly lined, and freely supplied with blood vessels, so that even in the coldest weather they can moisten and warm the air before it reaches the lungs. The presence of hairs at the entrance to the nostrils also serve as a filter.

The more intelligent classes of humanity have well-formed noses, and as this feature occupies a most conspicuous area on the face, the form, size, and general proportions have a potent effect upon the appearance of human beings. The nose is commented upon more than any other feature, but the old saying, "A large nose evidences a clever person," is by-gone; and like many other famous presumptions, has fallen away in the path of advancement. However, this idiom did great injury to the science of Physiognomy, as people lost faith because of disappointment in this one sign.

The modern science has progressed beyond that age of incomprehensive reasoning, and students now realize that *one feature alone* cannot *establish* a trait; as there may be many contradictory signs that modify to a great extent some pronounced signification of a certain feature.

The Mongolians and Ethiopians have flat, undeveloped noses; while the Caucasion race has the high, thin, well developed nose. The typical Caucasion nose is a little less than one-third the height of the frontal facial plane (from the bottom of the chin to the hair line of the forehead). The Mongolian and Ethiopian nose occupies a little less than one fourth the height of the frontal facial plane.

The nose in extraordinary cases continues to grow and develop for the major portion of a life-time, living

habits, and occupation are the cause, providing a diseased condition is not evidenced.

An idiot may have a large nose which in itself would suggest ability, but the other features and the conformation of the cranium would establish the mental deficiency, and lack of character and reason, (Plate 1, Fig. 10). Character is strongly depicted by the nose. The bony structure is the portion that proclaims or disavows the possession of energy, leadership, executive ability and intensity of thought. The firmness of the cartilaginous structure and the symmetry and uniformity of the lines are distinctions of great value in interpreting human nature.

Classification of Noses

The author has classified noses into the following eight types:

ROMAN	Plate 3,	A-1 to A-6	–lateral	view
AQUILINE	"	C-1 to C-6	"	"
SEMETIC	"	B-1 to B-6	"	"
RETROUSSE	"	E-1 to E-6	"	"
GRECIAN	"	D-1 to D-6	"	"
COMPOUND AQUILINE	"	H-1 to H-6	"	"
COMPOUND SEMETIC	"	G-1 to G-6	"	"
COMPOUND GRECIAN	"	F-1 to F-6	"	"

ROMAN NOSE:—The greatest projection above the facial plane is attained by the convexity of the Roman nose, which has as its distinguishing features the prominent ridge bone that curves from root to base, (Plate 3, Fig. 4). It is the nose of the old time aristocrat, and is very frequently found among people of high social standing in present day society. Worry and pessimism are pronounced. A quick, impatient, nervous temperament is indicated, but perseverance, exhaustive efforts and energy, together with the power of leadership, executive and constructive ability, assertion and dominancy, and a dictatorial nature are signified.

Men with pronounced Roman noses, highly and firmly arched and of large proportions, with good

breadth, are noted for past endeavors in business, politics and war. They demand positions of leadership and power of executive control; wherein they are singularly successful. They are more commanding in words than in deeds; as their greatest power lies in the firmness of their convictions, which are expressed with forcefulness and animation. They cannot follow the directions and leadership of others with aptitude, and extremely dislike taking orders. It is a pronounced masculine nose. Intense, clear, sound reasoning is not usual, as impatience follows the Roman nose and this is contrary to comprehensive judgment. Other traits oftimes counteract this deficiency and must be carefully weighed before the conclusion is formed. The favorable nose is one with at least a slight crown or convexity to the ridge, for without this, assertiveness and executive ability are usually wanting. The Roman nose can have many different proportions, all of which have certain significance. Study the profiles (Plate 3, A-1 to A-6) and note the different shapes and lines. The crushed or low nose denotes thrift, economy, and firmness or stubbornness, (Plate 3, A-3); while the medium type, (Plate 3, A-6), expresses aggressiveness and keenness. The very prominent variety, (Plate 3, A-1), evidences inquisitiveness, desire for knowledge, love of literature and society, and the prominent, drooping type, (Plate 3, Fig. 4), denotes pessimism, and a curious nature.

The following traits apply,
ENERGY — INDEPENDENCE — DOMINEERING — COMMANDING — ASSERTIVE — AUSTERE — FORCEFUL — PERSEVERING — EGOTISTICAL — NERVOUS — IMPATIENT — GREED — COVETOUSNESS.

AQUILINE NOSE:—The Aquiline and Roman noses bear some resemblance, the distinguishing feature being that the ridge of the Roman nose curves outward convexly from the root and is especially high, with an angle or acute break at some point near the middle of the ridge, (Plate 3, Fig. 4); while the Aquiline nose has one continuous convex outward curve from root to tip, (Plate 3,

Physiognomical Illustrations

PLATE No. 3

Noses

Fig. C-1 to C-6, and Fig. 10). Shrewdness, caution, suspicion, executive ability and energy are denoted. The self-seeker and hard driver. Leadership is not so pronounced as in the Roman nose, while nervousness, irritability and tactlessness are not denoted. The short, narrow type is less forceful than the broad or long variety. The narrow, pointed, drooping type denotes pessimism and discrimination, (Plate 3, Fig. 15)). Of the Mental Natures.

The following traits apply,—

SHREWD — CAUTIOUS — SECRETIVE — INQUISITIVE — ARISTOCRATIC — ALERT — ENERGETIC — PERSISTENT — ENVIOUS — SUSPICIOUS — GRASPING — COLD-HEARTED — PESSIMISTIC.

SEMETIC NOSE:—This variety of nose varies from both the Roman and Aquiline in the fact that it curves downward and bends inward at the base. It is broad, acutely convexly curved, and usually of large proportions. It denotes obstinacy, shrewdness, analyzing and synthetical ability. A keen insight to human nature. It is the commercial business nose. The bargain-hunter and hard bargain driver and the money seeker. Executive, reasoning, contriving, unscrupulous and forceful traits are denoted. It is found chiefly among the Assyrians, Arabians, and Hebrews; however, it is quite common in the Mongolian and Ethiopian races, (Plate 3, Figs. B-1 to B-6). If short, from root to tip, optimism and light heartedness are denoted, together with good humor, confidence, and pertness, (Plate 3, Fig. B-6 and Fig. 18). If long, from root to tip, projecting downward and drooping over the upper lips, (Plate 3, Fig. B-5), a pessimistic, melancholic, willful, selfish, haughty, insolent nature is signified, while clear judgment and reason are possessed. Of the Muscular Natures.

The following traits apply,—

SHREWDNESS — PLANNING — SCHEMING — CALCULATING — MEDITATIVE — ANALYTICAL — AMBITIOUS — ENERGETIC — ASSERTIVE — BOLD — STUBBORN — GREEDY — WILFUL — COMMERCIAL.

RETROUSSE NOSE—The distinctive feature of this type is a curving inward or concave profile or ridge, from root to top. As convex lines denote strength and concave lines weakness, this variety of nose, therefore, is not forceful, (Plate 3, Figs. E-1 to E-6). Lack of forcibleness leads to timidity and shyness. If the ridge is short from root to tip, with a decided tilt upward, (Plate 3, Fig. E-6), good nature, optimism and a cheerful, playful nature is denoted. Curiosity and impulsiveness, sarcasm, and cutting jests, patience, thrift, economy, emotional love, affection and the inquisitive nature is signified. The long, thin variety with slight inward curvature of the profile, (Plate 3, Fig. E-2). denotes refinement, cleverness, responsiveness, graciousness, and love of music.

When the nostrils roll backward, the line from base to tip slanting upward, coarseness of tendencies and sensibilities, and uncontrolled passion are evidenced. This structure places the nostrils in direct view from in front, (Plate 3, Fig. 11.) If drawn in at the root, the tip drawn upward, with thickened nostrils and colorless, then, the ravages of catarrh are evident and the entire face is dull and uninteresting; the mentality becomes affected and pessimistic tendencies are noted, (Plate 3, Fig. 1). The well proportioned retrousse nose betokens good memory and love of literature and knowledge, while originality, intense reasoning and constructive ability is lacking. This type of nose is feminine and while possessed by some men it denotes female traits and therefore lack of aggression and leadership. However versatility, grace and cleverness are expressed. Of the Mental Natures.

The following traits apply,—

WIT — HUMOR — GRACIOUS — LOVABLE — CHEERFUL — LIGHT-HEARTED — VERSATILE — HAUGHTY — SARCASTIC — RESTLESS — CURIOUS — SHY — TIMID — SAUCY — TACTLESS — OBSTINATE — JEALOUS — FRIVOLOUS.

GRECIAN NOSE:—The artistic nose, of ancient portraiture and sculpture, characteristic of beauty, straight in profile from root to tip, narrow and pointed, (Plate 3, Figs. D-1 to D-6 also Fig. 7). Even disposition, calmness, and self control, love of music, art and refinement, ease, luxury and love of literature are denoted. It is the nose of complaisance, and the product of good breeding. The lines are neither constructively strong or weak and therefore imply moderation and reason in all desires and tendencies. Neither aggressiveness nor timidity are expressed, nor the choleric or phlegmatic temperament; hence, placidity, gentleness and graciousness reign. The typical Grecian nose has its base at right angles to the facial plane. When pointed upward from the base with extreme length from the tip to the base; then, inquisitiveness and curiosity, and a craving for knowledge obtains; but if in conjunction with narrowness of head and eyes, then news-seeking and inquisitive trifling are denoted. It is distinctly feminine. however, possessed by many males, especially professional men. Of the Mental Natures.

The following traits apply,—

PLACIDITY — GRACE — CHARM — REFINEMENT — INTELLECTUALITY — EQUITABLE — REASON — SUAVITY — CURIOUS — EASE-LOVING — ARTISTIC — RELIABLE — HONEST — CONSTANT — TRUSTWORTHY — KIND — GENTLE — PRACTICAL.

COMPOUND AQUILINE NOSE:—(which has been previously unclassified or named). This type is distinctive, from the aquiline variety in that the outward curve of the ridge does not sweep continuously from root, but becomes more prominent and acute near the tip. (Plate 3, Figs. H-1 to H-2). When the upper part of the ridge is practically straight, both Aquiline and Grecian traits are expressed, (Plate 3, Figs. 9 and 16); but when the upper profile is convex with acute break near the tip, both Roman and Aquiline traits are denoted. The Compound Aquiline nose denotes love of ease and repose, especially if combined with the accent. Caution, discretion, mildness

of temperament, fortitude, good judgment and reason; ability for literary work and details.

The Roman accent expresses aggression, assertion, self-esteem, commercial ability, and quick reason; together with irritability, covetousness, greed and thrift.

The following traits apply,—

HOME-LOVING — DISCRIMINATING — THRIFTY — FIRM — PRUDENT — IMAGINATIVE — IRRITABLE — SLOW — EASE-LOVING — DELIBERATE — QUIET — PRACTICAL — UNBIASED.

COMPOUND SEMETIC NOSE:—(Which has been previously unclassed or named). This type is distinctive, from the purely Semetic variety, in that the curve of the ridge is concave, as it leaves the root of the nose and becomes convex, sweeping downward and inward at the tip, (Plate 3, G-1 to G-6). When the concave portion of the ridge is pronounced, (Plate 3, Fig. G-3), a combination of both Semetic and Retrousse influence obtains. Thoughtful, Inquisitive, Suave, Thrifty, Affectionate, Stubborn, and Selfish traits are indicated, while, if the ridge is more accented by the convex line, (Plate 3, Fig. G-2), then both Roman and Semetic traits are denoted. Forceful Energetic, Assertive, Tyrannical, Impatient traits are expressed.

COMPOUND GRECIAN NOSE:—(Which has been previously unclassified or named). This type is distinctive in that the ridge line beginning at the root is concave, undulating, to a convex line near the middle, and again sweeping downward to a concave profile near the tip, (Plate 3, Figs. F-1 to F-6 and Fig. 12.) This combines Roman, Aquiline and Grecian traits. It is the nose of music, art and literature, while executive capacity, creative and constructive ability is also possessed. The compound Grecian nose while denoting more intensity of thought and action than the purely Grecian variety, does not evidence the forcefulness and aggression of the Roman type; however, assertion, willfulness and resolution are ex-

pressed, together with scientific, inventive and good reasoning power and decision.

The following traits apply,—

INDEPENDENCE — ENERGY — SERIOUSNESS — PRACTICAL — INDUSTRIOUS — ORIGINAL AND IMAGINATIVE —EXECUTIVE — FORCEFUL — SAGACIOUS — KEEN — WILFUL AND ARBITRARY —CAUTIOUS.

MISCELLANEOUS:—A favorable length of the nose is about *one-third* that of the facial plane. Considering the nose length from the root, or where it joins the brow, downward to the septum, or where the base joins the face. The projection from the face outward should be about *one sixth* that of the facial plane. A broad nose with the tip neither pointed or fleshy, but well formed and defined, with firm, slightly convex ridge, is the nose of the creative genius and forceful personality. It is usually found on well proportioned faces. (Plate 3, Figs. 2 and 13). Great people have well formed noses. Discrimination, is expressed in the long nose drawn down at the tip and creased; which gives breadth and fullness to the base, (Plate 3, Fig. 3).

Thought and analysis is denoted when a slight depression occurs in the ridge of the nose just before it joins the root or brow, giving the accent near the root and showing a muscular tissue over the sinus cavity; which is the result of mental work, (Plate 3, Figs. 4 and 17). This is the nose that expresses a high degree of intensity, executive ability, command, energy, and force.

When the accent is near or below the middle of the ridge it is of a cartilaginous foundation and lacks the bony structure of the upper ridge; this bespeaks a weaker degree of the above qualities together with cunning, and sarcastic tendencies.

The flat nose with dilated nostrils and straight or concave ridge, (Plate 3, Fig. 6 and Fig. 14), is weak in structure and indicates weak traits; as lack of self-reliance,

executive ability, and energy obtain; while selfishness and narrow mindedness are expressed.

Suspicion and Slyness are signified in the nose with hollow, narrow ridge from root to tip and the base drawn upward from lip to tip. Caution, timidity and lack of stability are expressed (Plate 3, Fig. 8).

The practical nature is expressed when tip of nose is broad and firm, with straight upper ridge. A leaning toward the mechanical, constructive and scientific lines is denoted (Plate 3, Fig. 13).

CHAPTER XVI.

The Ears

The auditory apparatus consists of: the EXTERNAL EAR; THE MIDDLE EAR; THE INTERNAL EAR; AND THE AUDITORY NERVE.

THE EXTERNAL EAR consists of an expanded portion called the *Auricle* and *Auditory Canal*, but known to laymen as the ear, (the part exposed to view at the sides of the head). The auricle except the lower portion consists of a frame work of cartilage, containing some fatty tissues and a few muscles. It is covered with skin and joined to the surrounding parts by ligaments and muscles. It is very irregular in shape, and appears to be formed both for the purpose of providing a receiver of sound for the ear drum and also a pleasing adornment for the sides of the head. The central depression of the external ear is called the concha, it serves to collect the sound waves from the air and conduct them into the auditory canal.

THE AUDITORY CANAL is a tubular passage, leading from the concha to the drum-membrane. The exterior portion of the wall of the auditory canal consists of cartilage, which connects to the auricle; the posterior portion is hollowed out of the temporal bone. It is lined with a prolongation of the skin, which in the outer half of the canal is very thick and not sensitive; while the inner half is highly sensitive. Near the orifice the skin is furnished

with a few hairs, and further inward with modified sweat-glands which secrete a yellow, pasty substance resembling wax. This is thought to be offensive to insects and consequently a defense against their intrusion.

THE MIDDLE EAR is a small irregular bony cavity, situated in the temporal bone and lined with mucous membrane. It is separated from the external auditory canal by the drum-membrane and from the internal ear by a very thin, bony wall in which there are two small openings covered with membrane. The oval middle ear is so small that five or six drops of water completely fill it.

THE INTERNAL EAR receives the termination of the auditory nerve, and is therefore the essential part of the organ of hearing. It consists of a bony labyrinth, which is composed of a series of peculiarly shaped cavities; hollowed out of the temporal bone.

THE AUDITORY NERVE is a sensory nerve with two distinct sets of fibres which differ in function and destination. One set terminates around the cells of the organ of Corti, while the other set communicates with the brain.

PHYSIOLOGY OF HEARING,—All bodies which produce sound are in a state of vibration, and communicate their vibrations to the air, with which they are in contact. When these air waves, set in motion by sonorous bodies enter the external auditory canal, they cause the drum-membrane to vibrate; as stretched membranes take up vibrations from the air with great readiness. These vibrations are communicated to the chain of tiny bones stretched across the middle ear, and their oscillations cause the membrane leading into the internal ear to be alternatively pushed in and drawn out; the vibrations are in this way transmitted to the perilymph. The movements of the perilymph are transmitted to the basilar membrane, and set some of the strings in motion. In some unknown way the movements are transmitted to the hair-cells and through them to the nerve-fibres, at their base. By means

of the nerve-fibres the stimulus is conveyed to the brain and interpreted there, so that it is with the *Brain* we hear.

The Author has given the foregoing anatomical analysis of the ear and physiology of hearing to acquaint the student with the complexity of the sense of hearing and how it is directly connected to the brain; which gives the practical foundation for the logic, of the hypothesis, that hearing not only effects the capabilities of the brain but also reflects upon the personality and nature; therefore, the size, shape and position of the ears are important indications.

The acme of refinement in auricular qualities, is music; and talent and appreciation, of it, is dependent upon the ability of the ears to clearly transmit the sounds to the brain. The large, thin ear with a deep, broad concha, or central depression, has proven to be the most efficient sound interpreter; and it becomes the ear of music.

Classification of Ears

The ears can be classified as follows: — THICK — THIN — BROAD — NARROW — SMALL — LARGE — PROJECTING — FLAT.

THICK EARS are of the Physical and Muscular Natures, and accompany the well developed, rugged physique; they are, therefore, coarse and heavy in appearance and lack refinement which is characteristic of these natures. Taken in any of the classifications,—Broad, narrow, small, large, projecting or flat, the thick ear is less sensitive, owing to the rigidity of structure, than thin translucent ears. Shrewdness from the inward proneness of mind, together with reason, practicality, judgment, caution, and creative ability are denoted while, musical appreciation and ability are indifferent, (Plate A-B-C and D).

THIN EARS are of the Mental Natures and betoken refinement. Owing to the sensitiveness, of the translucent auricle and concha, and the clear transmission of sound waves to the drum-membrane, it becomes possible to

distinguish fine variations of tone and to appreciate delicacy of sound and music. The thin ear, in any variety, becomes more efficient for musical attainments, and memory of things heard. The imaginative, dream-like, idealistic temperament is pronounced; while practical creative ability is mediocre, (Plates E and F).

BROAD EARS or prominent, well convoluted ears are of practical value for the expansive surface they present in gathering the sound waves and evidence good auditory qualities. This enhances the musical interpretative ability and keenness of hearing. When the broad ear is thin and translucent, then we have the pronounced musical ear with maximum efficiency. Shyness, reserve, timidity, and lack of executive ability are also denoted, (Plate 1, Fig. 13).

NARROW EARS do not possess an expansive surface for the accumulation of sound waves, and are not so efficient as broad ears. Narrowness of the auricle causes a contracted concha, both conditions being contrary to good interpretation of sound.

Reason and judgment, imagination and literary ability are evidenced, (Plate 1, Fig. 14).

SMALL EARS are the least efficient, as their contracted form is not productive of auditory keenness, and lack musical aptness; however, if thin and broad and translucent and not too flat, other features being favorable, fair musical appreciation may obtain; but not in comparison to the broad, large, translucent ear. The small ear expresses refinement, reason, judgment, love of literature, and book knowledge; while memory, musical ability, and idealism are indifferent.

LARGE EARS,—The large, expansive, well formed ears, with breadth, and deep convolutions are the most generally efficient receivers of sound and delicate interpretation. They present a large surface for accumulation of the waves, and effect clear transmission to the drum-membrane. They foretell love of music and musical ability. The majority of great musicians have possessed large,

thin ears. Memory, imagination, sense of equilibrium; intuition, non-aggressiveness and graciousness are indicated.

PROJECTING EARS are most favorable, as the angle of projection places the receiving surface more directly in the path of the sound waves, as they approach. Any variety of ear will be more efficient if it has pronounced projection.

FLAT EARS are contrary to high efficiency in sound receiving; the auditory surface does not project sufficiently to make a thorough accumulation of the sound waves as they pass by. Any variety of ear will be reduced in efficiency by flatness of the auricle.

POSITION OF THE EARS. Distance from the top of head to orifice of the ear, also distance from forehead, and from back of head is a key to the Mental and Physical or Muscular natures. The base of the brain is located on a line drawn through the head from the orifice of one ear to that of the other.

The lower the ear is located below the top of the head, or the upper central area, the higher the brain will be; and, therefore, more powerful. If located near the front or anterior portion of the head, mental capacity will be less pronounced than physical; while, if located near the back or posterior district, physical and muscular ability will out weigh and over-balance mental strength.

The favorable position for the ear is about two-thirds distant, from the front, and one-third from the back of head, in lateral view.

MISCELLANEOUS. Perfect ears, when considered from all angles, size and shape, are seldom found; however, well formed ears possessing a goodly number of favorable points are frequently observed.

Ears sometimes grow and develop through the major space of a lifetime; especially is this true with children who have very small ears. Large ears of children denote superior memory, love of music and brilliancy.

Physiognomical Illustrations

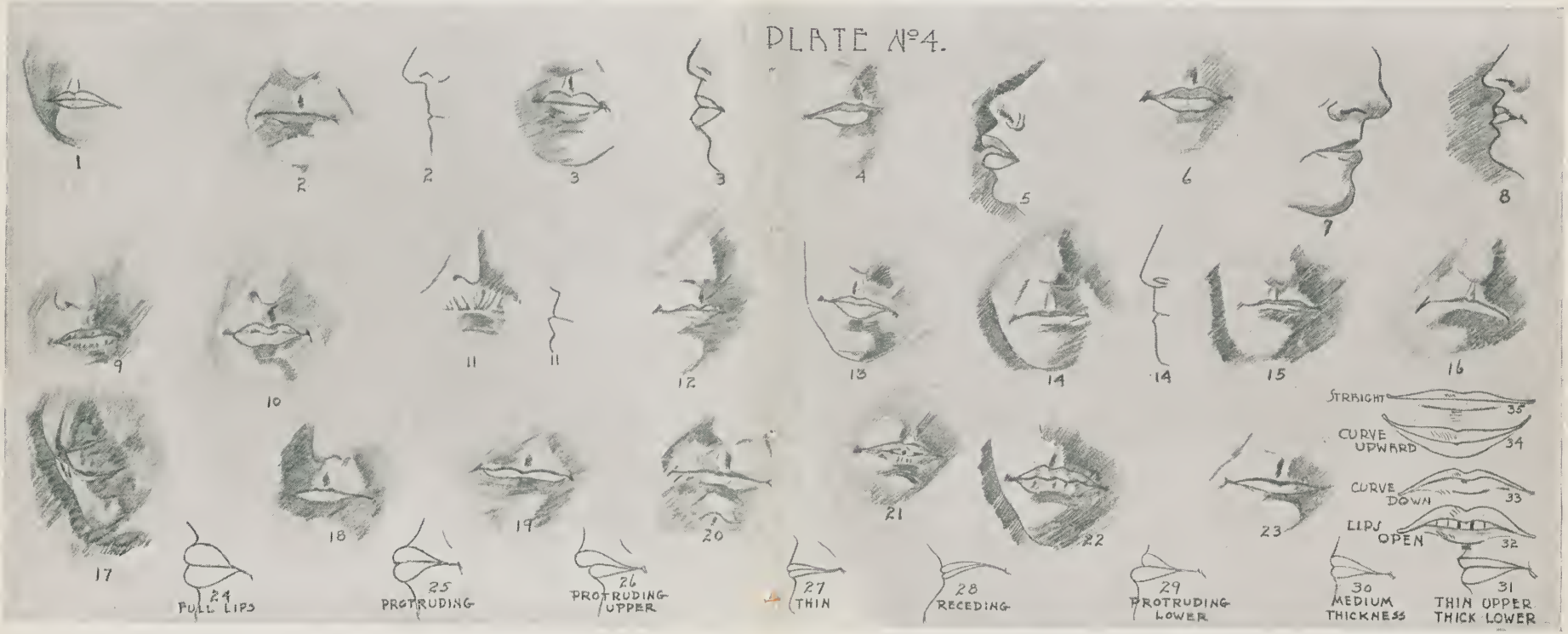

PLATE No. 4

Mouth, Teeth and Lips

CHAPTER XVII

The Mouth, Teeth and Lips

The *mouth,* through which that wonderful power the human voice is made possible, becomes of extreme and vital importance in the analysis of human nature. It is the organ, of many important duties, that give to the Body, continuation of life and to the Mind, expression of thoughts in words.

The *lips,* or edges of the openings into the mouth are lined with mucous membrane and controlled by delicate muscles that are sensitive to the emotions of the Spirit; and continually give expression to the momentary sensation of the mind or intellect. They also assist in the power of speech.

The *teeth* are located on the upper and lower jaws of the mouth and are composed of three substances,—Enamel, dentine, and cement, all harder than bone; enamel being the hardest substance found in the body. They are used for chewing and mixing the food with saliva, before it is taken into the stomach. Their appearance can add much or detract greatly from the personality.

The *tongue* is the special organ of the sense of taste and also assists in speech. It is the lively inmate of the mouth.

The power of speech, crying, and laughter; the sense of taste and the ability to consume food and water for the body, are possessed by the mouth and its accessory organs. The central position of this feature, on the face, being pre-eminently conspicuous and the duties it undertakes so important, it reflects nature and temperament to a very readable degree and possesses great physiognomical value. It is second only to the eyes in power of expression.

The employment of the mouth to such an extent, in life's daily duties, causes characteristics, moods or manner of action, to become so fixed upon the outlines that it develops into a "stamp of nature," and the idiom "Every man maketh his own mouth" obtains. For after characteristic

expressions have seized the muscles of this great organ, time after time, even into many millions, wearing upon it many traces of particular idiosyncrasies and eccentricities, of Mind and Spirit, then, the tale of nature is told and the science of Humanology is the key that interprets the truths imprinted thereon.

Refinement or coarseness of nature is expressed in the shape and general outlines. When the mouth is repulsive the personality also reflects the same offense. Innocence, love, and truth are freely expressed as well as vice, hatred and dishonesty.

Different kinds of mouths are classified as follows:—
GENERAL SIZE—DETAILED SHAPE AND OUTLINES.

General Size

SMALL MOUTHS:—The smaller the mouth, the less efficient ability it possesses; oratory, vocal, and ennunciatory qualifications are inferior. The mouth is a megaphone for the voice and consequently a large mouth has the advantage over a small mouth, that a large megaphone has over the smaller ones; and this circumstance influences the power of assertion. Therefore, leadership, command, forcefulness and influence are not signified; however, memory is denoted but as usual at the expense of reason; hence, reason and judgment are not pronounced.

The Fretful, nervous, irritable, querulous disposition, with lack of opinion and definite views, is denoted; (Plate 4, Fig. 1.) while refinement is indicated. This is the feminine mouth.

The small mouth drawn up with many vertical wrinkles in the upper lips, evidences willfulness, cold heartedness, severity, craftiness, greed, jealousy, and narrowness of mind and thought; also conceit, ill temper and a miserly, covetous nature, (Plate 4, Fig. 11).

MEDIUM MOUTHS.—The medium sized mouth is typical of firmness, decision, and industry. It evidences reason, diplomacy, logic, and creative ability. Seriousness, shrewdness, adaptability for details and commercial in-

tuitiveness apply, (Plate 4, Fig. 2). This is the assertive, aggressive, domineering mouth of leadership.

LARGE MOUTHS.—Breadth in features is always an advantageous, favorable indication; hence, large, broad mouths betoken generosity, graciousness, reason, goodness of nature, broad-mindedness, cheer, kindness, versatility, and adaptability. Oratorical, vocal and enunciatory ability are possessed.

Talking, smiles, and laughter strengthen and expand the muscles of the mouth; increase the size and mould its outlines; therefore, the broad, well formed mouth is a product of good nature, mirth, happiness, contentment and a light hearted disposition. Lack of aggression, yielding and proneness for ease and pleasure, together with too little self consideration when imposed upon by others, oftimes obtain, (Plate D) and (Plate 4, Fig. 23).

Detailed Shape and Outlines

DOWNWARD CURVE.—(Plate 4, Figs. 33 and 16). This is the mouth of sorrow, and pessimism, with drooping corners and arched outlines. It bespeaks the troubled heart and the Spirit that lives under a cloud of worry. Lack of keen reasoning, and clearness of mind, together with a narrow outlook upon life is evidenced.

STRAIGHT.—(Plate 4, Fig. 35). The mouth of order, firmness, austerity, idealism, ability for details, organization, command, leadership, precision, assertion, zealousness, fervor, eagerness, narrow-mindedness, greed and selfishness. However, if the lips are loose and full, then the traits are modified and even generosity, equity, fairness, graciousness, and tolerance are expressed.

UPWARD CURVE.—(Plate 4, Figs. 34 and 17). The mouth of mirth, joy, happiness, good nature and generosity, has the corners turned upward; lips bright red and drawn to a point, cheeks inclined to dimple. When smiling or laughing every mouth takes this form and the muscles that serve to express these emotions are brought into play; hence, the upward curve is the product of a

joyous, light hearted disposition. Memory is more pronounced than reason. Ability to make and retain friends predominates; also humor, and optimism, rapid thought and versatility.

Lips

The real key to the traits, expressed by the mouth, are the lips, and owing to the absolute muscular control, hundreds of emotions are depicted in the movements of these accessory organs. Character becomes stamped upon them, through use, and they take the most natural form; which is readily readable. The firmly set, in-drawn lips betoken rigid firmness. The corners drop in sorrow and worry and turn upward in joy, laughter and happiness. The loose lips express lack of precision and keenness; while, the open lips, that expose the teeth denote coarseness, meagre intellectuality and poor breeding.

The nerves of animal sensibilities are closely associated with the lips and the greater expanse of the membranous tissue appearing in the roll of the lips, the more nerves are brought into direct action; therefore, the affect of physical contact becomes more enhanced. Thick, full lips are possessed of tendencies toward physical excess. This gives the psychological reason for the *desire to kiss*, and caress, (Plate 4, Fig. 24).

Favorable lips do not protrude or recede from the frontal facial plane. The upper lip should be larger than the lower one and both lips should be even, (one not protruding over the other). The corners of the mouth should center under the eyes. Mental and physical balance are expressed, also good reason, judgment, creative and inventive ability, (Plate 4, Fig. 2).

A PROJECTING MOUTH.—Thick lips with teeth pressing forward and outward denotes lethargy, love of ease, uncouthness, lack of refinement, greed for food, and enthusiastic affection; also animal tendencies. (Plate 4, Figs. 3 and 25).

LARGE MOUTH, with full, even, loose, lips indicates sensuousness; however, if lips are tightly compressed this trait is practically subdued, and in its stead mastery of temptation and self control are evidenced, (Plate 4, Fig. 4).

PARTED LIPS, expressionless, and without the delicate muscular control, indicate inferior mentality and are typical of the idiot, with no capacity for thought or control. (Plate 4, Fig. 5).

The DRAWN UP LOWER LIPS, in center, giving the appearance of a depression under the lips, with lower center line, curving upward as an inverted crescent, denote mildness, suavity, discretion, shyness, caution, prudence, and forecast, (Plate 4, Fig. 6).

SHORT UPPER LIPS are feminine and when posessed by women denote nervousness, excitability, jealousy, narrow-mindedness, and assertion. With men it denotes indecision, feminine traits economy and industry, (Plate 4, Fig. 8).

When the LOWER LIPS AND JAWS PROJECT beyond the upper lips, with prominent chin below, highly arched nose ridge and low forehead, this is the mouth of the criminal, bully, blustering fellow; with a desire to domineer. The following hypothesis explains the reason for these traits:—The exceptionally prominent chin and highly arched nose ridge both depict assertion, aggression, willfulness, and selfishness; while, the low forehead signifies lack of reason and judgment; hence, there is no control of the temper and the pronounced traits of boldness and viciousness go unrestrained, (Plate 4, Fig. 7). Malignant design, wanton disregard of the rights of others; grudge, pique, and animosity prevail.

The CURLED UPPER LIP; one side higher than the other and projecting at the high side as though swollen, (Plate 4, Fig. 15), bespeaks the surly, peevish, cross, spiteful, habitual bad temper. Keen calculation and premeditation, slyness and shrewdness are possessed, also malignant design.

LOOSE PUFFY LIPS MARKED WITH FURROWS, (Plate 4, Figs. 9 and 10), with lower lip drooping forward, oftimes showing more red on one side, giving mouth a swollen appearance, expresses passion, temper, lack of reason and logic; a querulous, fretful and whining fault-finding nature.

LONG UPPER LIPS, firmly closed and thin are masculine, (Plate 4, Fig. 18 and Plate F). Firmness is pronounced, while persistence, energy, dry wit and humor, with always a serious countenance, are evidenced. When upper lip arches outward decision of character is betokened, and if it recedes a tolerant, surrendering, considerate nature is expressed.

EVEN COMPRESSED LIPS, with thin upper lips and lower drawn up firmly, (Plate 4, Fig. 14), express the intense mental nature, active and resourceful; with ability to accomplish things undertaken. Good reason and judgment and thoroughness in calculation and planning.

THIN WAVY UPPER LIPS that curl on either side and are angular at center, with lower lip of wavy outline, and deep corners, (Plate 4, Fig. 19), expresses irritability, over sensitiveness, enmity of heart, malice and spite, while intent of purpose, love of literature and knowledge are possessed.

A DIP IN THE CENTER OF THE UPPER LIP, with even compressed lips, (Plate 4, Fig. 13). Concentration of thought and purpose, and application are pronounced. Love of music, literature, and knowledge are possessed.

FULLNESS IN THE UPPER LIP FROM BASE OF NOSE to the red line, together with puffy lower lips drooping at each side, with high, drawn up ball of chin and deep corners to the mouth, all suggesting hard, muscular flesh, (Plate 4, Fig. 20), denote firmness, extreme temper, and tendency for dissipation. Fervid passion, vindictiveness, irritability and willfulness; however, if this variety of mouth is large the above traits are modified and graciousness, good-will and sociability are possessed.

SHORT UNDER LIP, curling outward; large mouth giving an acute depressed angle between the ball of the chin and lips; together with upper lip drooping at an angle in center, (Plate 4, Fig. 23), foretells well defined purpose, discretion, caution, secretiveness, calm even disposition, inclined toward generosity, and reasonableness. Forceful, and commanding.

OPEN LIPS, (Plate 4, Figs. 5-21 and 32). When lips are naturally a little open, showing teeth; with other features denoting intellectuality, a cruel, heartless nature, with animal instincts is denoted; while, if muscular traits are expressed by other features, then kind-heartedness, and a yielding, affectionate nature is evidenced.

Nasal stoppage from catarrh and adenoids oftimes causes the mouth to be held slightly open for breathing purposes, this is a frequent condition with children, and should be given immediate medical attention, as nothing so detracts from the personality as evidences of disease upon the features. Dwarfed mentality is sure to follow if neglected.

CRACKED, SWOLLEN LOOSE LIPS heavily furrowed, (Plate 4, Fig. 22), evidence passion, sensuality, animal nature, lack of morality and self control. Dissipation and over indulgence are denoted.

THIN LIPS, (Plate 4, Fig 27), showing little red suggest precision, firmness, order, sarcasm, self-reliance, thrift, shrewdness, and executive ability. They are of the Mental Natures. Coldness of heart, narrowness of mental scope, selfishness, severity and austerity, penuriousness; unforgiving, unyielding, fault-finding and willfulness are also possessed.

THICK LIPS, (Plate 4, Figs. 24 and 25), bespeak good-nature, generosity, kindness, affection, passion, languor, slothfulness, lack of culture; ease loving, and carefree traits, with indifferent mentality.

RECEDING LIPS, (Plate 4, Fig. 28). Thin and tightly drawn, indicate firmness, greed, willfulness, stubborn, uncompromising traits.

PROTRUDING LOWER LIP, (Plate 4, Fig. 29), foreshows obstinacy, willful determination, defiance, and aggressiveness.

MEDIUM THICKNESS OF LIPS, (Plate 4, Fig. 30), denotes a calm even disposition, with a fair balance between the Mental and Muscular Natures; possessed of general ability and judgment.

THIN UPPER, THICK LOWER LIPS, (Plate 4, Fig. 31), express, a combination of mental and muscular traits, firmness is indicated while modified by good nature. Shrewdness is betokened while influenced by frankness and lack of premeditation. Passion is evidenced but subdued by self control.

COLORLESS LIPS:—Bloodless or bluish indicate anaemia, and a weak heart; low vitality, lack of affection, indifference, cold-heartedness, and lack of enthusiasm.

RED LIPS:—Brilliant colored, red, healthy lips, bespeak activity, affection, generosity and goodness of nature, and a happy, contented nature.

Movement:—Action and quickness of thought are expressed in the lip movement. Rapid movement with good articulation, indicates a willful, stubborn, aggressive, emphatic, conceited nature; while slow movement betokens a placid, calm, deliberate, discreet, cautious, reasoning nature.

The Teeth

TEETH are symbols of refinement or coarseness of nature. Animal teeth are long, sturdy and thrust forward; likewise the human teeth of this variety betoken animal sensibilities; while medium size, even, perfect teeth in true alignment bespeak good breeding and ancestry.

BROAD TEETH, are of large, square jaws and the Muscular Natures, and denote decisiveness. Narrow teeth

usually accompany narrow jaws; they are of the Mental Natures and indicate refinement and intellectuality.

TEETH AND PERSONALITY:—Discolored, decayed, broken and dirty teeth are the product of carelessness, ignorance, ill-breeding, dissipation and *disgraceful neglect.* One of the greatest crimes that can be inflicted upon health and physical beauty is to disregard the highly important duty, *thorough care* of the teeth.

One may have well proportioned features, in good outlines and pleasing symmetry, clear complexion and nice hair, but all this charm and beauty can be marred and obliterated by bad, neglected teeth.

Voice, laughter and smiles all issue from the mouth; therefore, the teeth are observed in the most minute detail, especially during conversation. The mouth has for its frontispiece the lips and the lips have, for support and background, the teeth. As the teeth appear so prominently in the delightful, mirthful expressions of the Spirit, they become decided factors in the radiance of personality. There is nothing more beautiful than perfect, well-kept teeth, and antithetically, no condition more deplorable and downright disgusting, and repulsive than bad, neglected teeth.

Teeth should be brushed at least twice daily, upon arising in the morning and before retiring at night. The dentist should be visited at least once in six months and more often if necessary.

CHAPTER XVIII

Cheeks, Jaws, Chins, Necks, Wrinkles

Youth is expressed by round, prominent, red cheeks, that indicate health, activity and an energetic circulation of the blood, (Plate 1, Fig. 8); while the pallid, sunken cheek is typical of old age, indicating poor circulation, low vitality, inactivity and feebleness of constitution.

Along the path of life we find among all ages those who possess the youthful cheek and also persons who possess the aged cheek. It is quite obvious that health largely effects this condition, and with health comes vigor and activity of mind and body; while lethargy, inactivity and lack of vigor accompany the pallid, sunken, wan cheek.

As a key to nature the cheek is very readable and its analysis gives some definite facts that are necessary in arriving at the final conclusion of a trait; for it must be remembered that health greatly effects character and temperament.

Cheeks are classified as follows: ROUND — SUNKEN — ANGULAR.

ROUND CHEEKS, (Plate 5, Fig. 14), are typical of health, and this means activity, contentment, and a great boon to happiness. When accompanied by a robust, fleshy physique, the good natured, pleasant disposition is expressed, with love for ease and comfort. If round cheeks are firm and hard the Muscular Natures are denoted, (Plate B) and if soft the Physical Nature is signified, (Plate A) and (Plate 5, Fig. 12).

SUNKEN CHEEKS, (Plate 5, Fig. 13), if pallid, denote low vitality, poor circulation, ill health, indigestion and irritability; if the color is ruddy, signifying good blood circulation, then pronounced activity and the choleric temperament is evidenced. This is of the Mental Natures. The flat cheek is typical of tall physiques and betokens athletic ability.

ANGULAR CHEEKS:—Prominent and high cheek bones, with lean, definite profile, give the angular shape

to the face, (Plate D), also, (Plate 5, Fig. 4), and express determination, willfulness, aggression and firmness. The Red Skin Indians and Esquimaux have pronounced cheek bones, and obstinacy is foretold.

Jaws

As in the animal, strength of jaws, which is denoted by squareness and sturdy proportions, and angular prominence, is likewise indicated in the human jaw. The right angled jaw, (Plate 5, Fig. 20), is pugnacious and aggressive, stubborn and determined. From a lateral observation, the more nearly right angular the profile of the jaw, with well defined outline, the greater will power and determination is expressed. The square, broad jaw, or "lantern jaw," with the sunken cheeks is typical of a direct, willful and decisive nature, not easily influenced or convinced; while the narrow jaw, (Plate 5, Figs. 2 and 11), of the thin face and slender physique, denotes weak will power, lack of force, command and executive ability. As general strength of the bone structure of the human physique may be judged by the size and shape of the jaws, it becomes evident that the broad, heavy jaw is combined with a general sturdy framework. Primitive man, having possessed the large, prominent jaws, was likewise powerful in physique and capable of living under crude, severe conditions.

Broad jaws, (Plate 5, Fig. 9), are favorable but should not be greater in breadth than the upper portions of the head; as (Plate A), in which case reason and mentality become less pronounced than physical qualities; therefore, judgment and wisdom are affected by obstinacy and narrow-mindedness.

The square jaw, (Plate 5, Fig. 4) is masculine; while the narrow, (Plate 5, Fig. 13), is feminine.

Jaws may be classified as follows:—LANTERN-JAWS — ANGULAR — NARROW — DOUBLE.

LANTERN JAWS are the broad, well defined, square variety, usually of the thin cheeks and large bone. When

accompanied by ruddy cheeks, not sunken, the forceful, firm, obstinate, aggressive, willful, fearless, unyielding, determined nature is expressed; and if not too extreme in breadth, reason and judgment are denoted. If pallid and sunken cheeks are possessed, irritability, poor physical function, and but moderate mental capacity and energy are betokened.

ANGULAR JAWS, Plate 5,(Fig. 3 and 4), are formed by the square or high cheek and jaw bones and denote fearlessness, force, activity, persistence, harshness and stubborness. When prominent projection, approaching a right angle, is evidenced at the chin, will power is pronounced and reason and judgment over-balanced and weak, (Plate 4, Fig. 7) ; while, if the angle is acute and sloping upwards the more gracious, lenient and respectful nature is foretold. Constructive, creative and executive ability is evidenced. (Plate 4, Fig. 8).

NARROW JAWS are of the less sturdy type of physique and usually accompany the Mental Natures; they foreshow weakness and lack of power, force and the aggressiveness necessary to command, combat or influence others. Energy, determination and perseverance are mediocre and nervousness and excitability are possessed, (Plate 5, Figs. 11 and 13). The above qualifications, therefore, do not signify creative or constructive ability, while memory is denoted, and ability for details and sedentary occupations, where contact with strangers is not too frequent.

Chins

The mandible or lower jaw bone forms what is commonly known as the chin, (Plate 5, Fig. 25). It is the largest and strongest bone of the face. At birth, it consists of two lateral halves, which join and form one bone during the first or second year. It serves as a foundation for the lower teeth. As the chin is part of the jaw bone and becomes possible by the angle of the bone at its lower extremity, it is obvious that the jaws and chin are closely related.

Physiognomical Illustrations

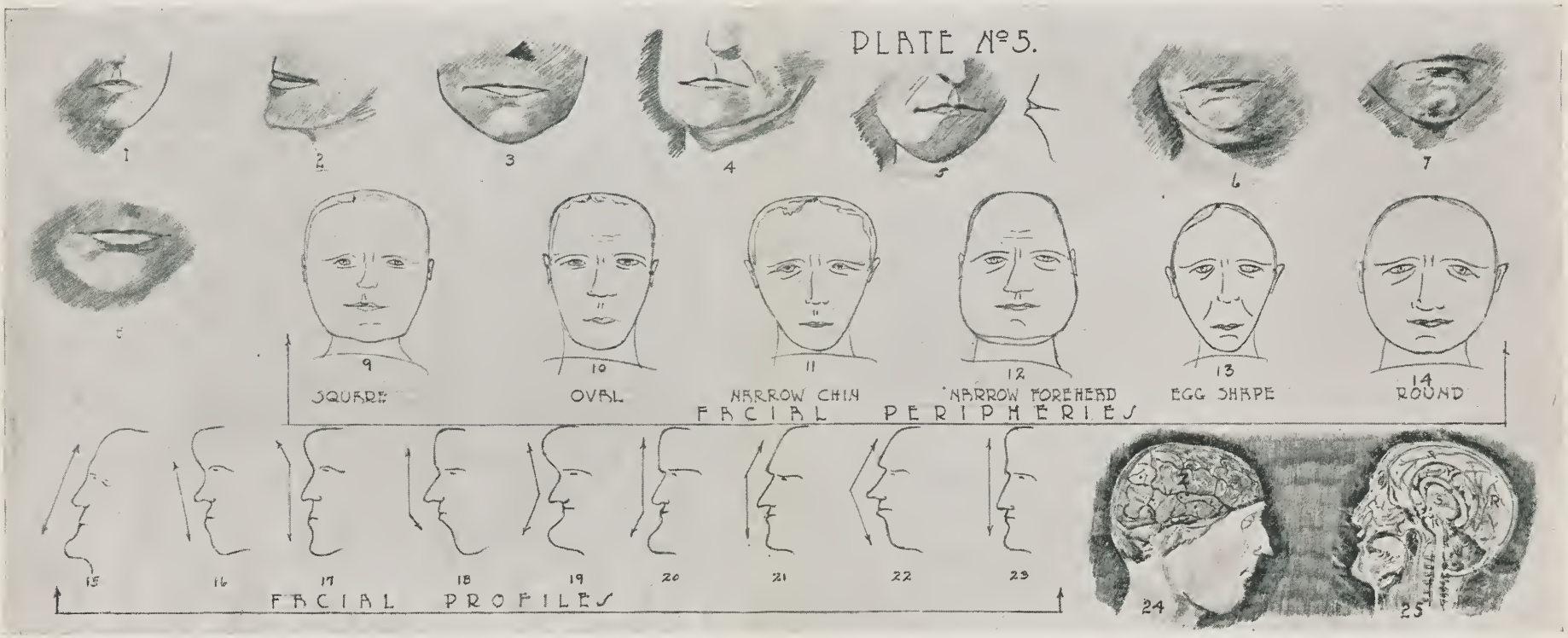

PLATE No. 5

Cheeks, Jaws, Chins, Facial Peripheries, Brain and Head Sections

Chins are classified as follows:— **ROUND — ANGULAR — PROMINENT — FLAT.**

The ROUND CHIN may be either broad, (Plate 5, Figs. 8 and 14), or narrow, (Plate 5, Fig. 13). If narrow the precise, cautious, self-conscious nature prevails, with lack of initiative and aggression. If broad and round and accompanied with large mouth, the sagacious, gracious, calm, placid, contented, pleasant and generous nature is indicated, (Plate 4, Fig. 23) and (Plate 5, Fig. 8.)

The ANGULAR CHIN may be either pointed or broad; if pointed, (Plate 5, Fig. 5), shyness, indifference, lack of force and will power applies. If broad and prominent, then we have the chin of the fighter and the forceful, determined, fearless, pugnacious, domineering nature, bold and resentful. Reason is overbalanced by temper, and therefore judgment and wisdom are weakened, while energy and perseverance are pronounced, (Plate 5, Fig. 3). If not too broad then reason, judgment and force of character are denoted, (Page 5, Fig. 1).

PROMINENT CHIN:—(Plate 5, Figs. 7, 15, 19, 20). In any variety, prominence of the chin implies added force and strength of will power and indicates conceit, self-esteem, pugnacity, obstinacy and selfishness, while executive ability, command and energy, love of knowledge and memory are expressed, (Plate 4, Fig. 8). Prominent chins are of feminine type, while often possessed by males.

FLAT CHINS:—In any variety imply fairness, conservatism, generosity and a suave nature; together with reason, judgment and wisdom; however, if extremely flat or receding, then lack of will power and force of character together with fearfulness, shyness and modesty are expressed, (Plate 1, Figs. 9 and 10).

THE DOUBLE CHIN is lethargic, generous, and indulgent. Love of ease and the sensual nature is expressed, (Plate 5, Fig. 6 and Plate A).

MISCELLANEOUS:—A face that is narrower at the angle of the jaw than through the head, shows weakness, and a nature lacking in will-power.

The extremely receding chin and prominent lips denote weakness and a tendency toward lethargy and inferior mentality.

The Neck

The neck usually combines with the physical structure, as to proportions, and is observed as to THICKNESS, HEIGHT and STRUCTURE.

The LONG, SLENDER NECK with readily defined lines between head and neck betoken grace and refinement, and is a feminine sign, usually associated with the tall slender, frail physique. It is contrary to strength and vitality and therefore indicates lack of aggression, and forcibleness; however, agility and grace of movement is pronounced. It usually accompanies the slender face and high, narrow forehead, indicating memory and therefore indifferent reason. Of the Mental Nature.

The SHORT, THICK NECK, or the masculine neck, which usually accompanies the sturdy physique and Muscular Natures betokens pugnacity, force, energy, aggression, fearlessness, endurance and vitality. It is favorable to oratory and vocal ability. The short, thick neck usually accompanies the broad face and head; which is favorable to reason rather than memory; hence, creative ability, initiative and executive ability are expressed.

STRUCTURE OF THE NECK:—The neck structure depends upon muscular, sinewy substance, which gives definite lines and firmness, or fleshy, fatty, adipose tissue that implies the physical phlegmatic nature. Extreme fullness in the back of the neck extending up to the posterior lower district of the brain and sometimes projecting beyond the back of the head affirms the sensual nature, caused through dissipation or over indulgence in food and physical excess. This condition evidences lack of keenness of in-

tellect and betokens the dull, inactive, sluggish Physical Nature.

Wrinkles

Millions of repetitions of muscle movements, caused by certain emotions or particular traits and characteristics, that occur daily in life and expand and relax the facial muscles, eventually form wrinkles, or furrows in the skin. Different thoughts and emotions bring various muscles into action and the deeper the resulting wrinkles become the more evident are the traits stamped upon the face.

The imprint of wrinkles is dependent upon the texture of the skin and activity of the glandular system; hence, emotions are not so readily stamped upon soft, pliable, oily skin, as upon the dry, coarse, thick skin; therefore, a trait is not always registered by wrinkles.

DEEP PARALLEL WRINKLES between eyebrows, (Plate 2, Fig. 18) ; together with the high, broad forehead betoken the analytical mind, capable of concentration and comprehension; imagination and creative work.

LINES RADIATING FROM CORNERS OF EYES in fan shape, imply wit and humor, quick thought and a cheerful, care free nature.

MANY SHALLOW WRINKLES BETWEEN EYEBROWS denote pessimism, anxiety, nervousness, and a worried nature, (Plate 2, Fig. 19.)

Short, broken lines on forehead, (Plate D), imply intensity of nature, seriousness, determination and reasoning power.

LONG LINES UNDER LOWER EYELIDS, running parallel with rim of lids, (Plate 2, Fig. 20), foretell love for dissipation and physical excitement. The muscles that function here are put into action by any excitement of the senses, causing pleasure, amusement, laughter or smiles. Old age and sickness causes lines under eyelids in which case the above traits are not signified.

STRAIGHT, SHALLOW LINES ACROSS FOREHEAD, (Plate 1, Fig. 12), bespeak a kind, thoughtful, serious, cogitating mind of accomplishment.

LINES EXTENDING FROM BASE OF NOSE, past corners of mouth denote wisdom and judgment, reason, determination and caution. They add venerableness to the countenance and suggest the thinker, inventor and creator, (Plate 4, Fig. 20).

CHAPTER XIX

Hair

The hair is a growth of the epidermis, developed in little pits, the hair-follicles, which extend downward into a deeper part of the true skin, or even into the subcutaneous tissue. The hair grows from the bottom of the little pit or follicle. The part which lies within the follicle is known as the root, and that portion which projects beyond the surface of the skin is called the shaft or stem. The substance of the hair is composed of coalesced horny cells, arranged in different layers and we usually distinguish three parts in the stem or shaft of the hair.

CUTICLE—An outer layer of delicate, scale-like cells.

FIBROUS SUBSTANCE—Middle portion, formed of elongated cells. These cells and the intercellular spaces contain a varying amount of pigment, and the color of the hair depends upon the quantity. The gray hair of old age is produced by loss of pigment.

MEDULA—The central pith formed of round cells.

GROWTH OF HAIR—Hair grows from the bottom of the follicle by multiplication of the soft cells which cover the papilla. These cells become elongated to form the fibres of the fibrous portion, and as they are pushed to the surface, they become flattened and form the cuticle. If the scalp is thick, pliable and moves freely over the skull, it is favorable to the growth of the hair. A thin scalp that is drawn tightly over the skull tends to constrict the blood

vessels, lessen the supply of blood, and cause *atrophy* of the roots of the hair by pressure. In such cases massage of the head loosens the scalp, improves the circulation of the blood, and usually stimulates the growth of hair. Hair is not smooth, but scaly, as observed under the magnifying glass. There is no blood in the hair and it is slow to decay after death, lasting almost as long as the bones.

Hair from the standpoint of Ethnology falls in three great divisions or types, according to the human races. It is closely identified with color of skin, and it is the most tell-tale symbol of ancestry.

When the curtain first rises on the stage of the gray dawn of history, as early as 4000 or 3000 B. C., we find the races of mankind. As to distinctiveness in form, color and physiognomy, the human species were divided into three chief types or races, known as follows—1st BLACK (Ethiopian or Negro), 2nd YELLOW (Turanian or Mongolian) and 3rd WHITE (Caucasian).

The three races have very distinctive hair form. If one should take a powerful magnifying glass and look at the cross sections of hairs cut from the heads of persons of the three races, the following conditions would be observed. The section through one of the Black Race hairs would be round, and through the Yellow Race hair would be flat. The section of the White Race hair would be neither round nor flat, but oval; hence, we have the following premier classifications of hair—

(Curley)—ROUND HAIR—Black (Ethiopian or Negro) race.

(Straight)—FLAT HAIR—Yellow (Turanian or Mongolian) race.

(Wavy)—OVAL HAIR—White (Caucasian) race.

The Round curly hair of the Ethiopian or Negro is typical of a race that has thus far, in civilization, demonstrated the least mental efficiency, while the straight, flat hair of the Turanians is of a race that is slowly developing into strength of mentality, but only mediocre progress has been made in arts and science. The oval wavy hair

of the Caucasians is typical of a race that has made by far the greatest advances in civilization, arts, and sciences and bespeaks possession of the highest mentality, imagination, memory, reason and judgment; also creative, constructive, and executive ability, and therefore, it is readily observable that they are the leaders of the world today.

Hair can be further classified as follows—COLOR—FINE—COARSE.

COLOR OF HAIR:—Black, red or auburn; brown, yellow, white and grey colors are found in the human hair; all dependent upon the amount of pigment contained in the intercellular space of the elongated cells in the fibrous substance; the more iron in the substance, the darker will be the hair.

BLACK HAIR:—Thick, coarse, black hair denotes the vigorous, intense, perceptive nature, often obstinate and inclined to outdoor life; it is of the Muscular Natures. Fine, black hair implies delicate sensibilities, memorizing, musical and detail ability; Southern descent, the phlegmatic, religious and unaggressive temperament.

Love of brilliant colors, and luxury; keen sense of taste and ability in domestic science. Lack of forcibleness and initiative; other brunette traits. Of the Mental Natures. The majority of great musicians have had dark hair, eyes and complexion.

RED HAIR, usually accompanied by highly colored skin, expresses the choleric, sensitive, aggressive, excitable nature; nervous and flushing at every unexpected movement. Quick, uncontrolled temper, perception and vivacity. Of course, muscular strength is evidenced. The auburn, brown and yellow hair is similar to that of the red, but less pronouncement of aggressive and malicious traits is evidenced.

LIGHT HAIR is typical of blue eyes and blond complexion as found in Northern people. This is evidenced by the descendants of Northern and of Southern Ancestry; the inhabitants of Southern countries have black hair from

youth, while the Northern people have a tendency toward light hair at youth, which becomes darker with age. The medium light hair implies the creative, practical, constructive, cogitative, resourceful nature; with force of character and independence of Spirit. Of the Mental Natures. The extreme light hair or decided blond, is of far Northern climates and denotes less mental strength and some lethargy, which is typical of people in cold atmospheres. Lack of musical tendency is expressed.

WHITE AND GRAY HAIR may be the result of excitement, worry, lost vitality, mental strain, over work, grief, sorrow, anxiety or old age. Hair turns gray at different periods in life, usually according to the degree of health and amount of mental strain experienced. "Tow-heads" are hereditary, while premature grayness is often the result of super-activity of mind, anxiety, worry and nervousness.

FINE HAIR characterizes refinement, and delicacy of physique, small bones, and joints; all of which betoken mediocre strength and vitality. It is typically feminine and foretells a nervous, fretful and excitable temperament. Usually of the Mental Natures.

COARSE HAIR signifies the sturdy, strong physique and usually accompanies the decided Muscular Nature; with thick bones and large joints, coarse, ruddy skin and pronounced physical vitality. It evidences masculine vigor, energy, aggressiveness, command, leadership and fearlessness; while refinement and restraint are lacking.

MISCELLANEOUS—The bald head is usually the result of super-activity of the brain, and mental application; however, disease oftimes removes the hair. Falling hair is quite customary when memory is pronounced, and baldness when reason and judgment are strong, as excessive mental work generates heat of the brain, which causes dryness and effects the roots of the hair. Thick hair signifies strength of constitution and betokens vitality and animality, endurance and energy.

CHAPTER XX.

PATHOGNOMY

A means of knowing expressions of the passions; the science of the signs by which human passions are indicated.

From the science of Phrenology we learn of the functions of certain districts of the brain and their relation to mental phenomena, and by the science of Physiognomy the student is enabled to interpret certain conformations of the features and associate them in an analogous manner with the traits and characteristics of the individual. By the science of Anthropology together with The Human Scale, we learn how to classify fundamental natures and provide the foundation or background upon which to build; while Pathognomy refers to the expression of emotions as betrayed by the muscular excitation of the features, that nervous control or lack of control makes evident. The inflection of the voice, gestures and impulsive movements bespeak the trend of mental phenomena, in the brain, of a subject under observation.

All of these sub-sciences act together and form the master science of Humanology; the complete science of *Human Analysis* and *Psychological Diagnosis*. Having as its foundation the Six Pure Natures of The Human Scale, and for detail the other sub-sciences. Builded upon the foundation of *Natures*.

The most important use of Pathognomy is to ascertain what the feelings and emotions of a person are *at any given moment*, and the temperamental attitude toward certain conditions, pleasant or unpleasant. From the other sub-sciences we learn the natural, normal traits and inclinations of people, or what they ordinarily are; however, some traits are only in slight evidence and must be cleverly detected; in which event the expressions of countenance, manner of conduct, impulsiveness, inflection of voice and character of speech are important auxiliaries in analysis.

The following temperamental traits can be observed from the many expressions of the features in pathognomical analysis:—ENTHUSIASTIC—AMIABLE—SPIRITED — ANIMATED — DEMOCRATIC — JOYOUS — GAY — SANGUINE — OPTIMISTIC — EMOTIONAL — JOCULAR — ENVIOUS — HOPEFUL — IMPATIENT— RESPONSIVE — FRIENDLY — APPRECIATIVE — BUOYANT — GENIAL — TALKATIVE — DRASTIC — ARBITRARY — RECKLESS — ARROGANT — AUTOCRATIC — EGOTISTICAL — INDISCREET — UNCIVIL — UNDIPLOMATIC — RETALIATORY — DOMINEERING — RELENTLESS — RASH — FLIPPANT — AGGRESSIVE — DESPOTIC — DISCOURTEOUS — WAYWARD — INSOLENT — HYSTERICAL — CHANGEABLE — FRIVOLOUS — FANCIFUL — FICKLE — PESSIMISTIC.

Great caution must be exercised in Pathognomical analysis as people are often prone to the *veiling* of countenance in a false mask of nerve and muscular control, or hypocritical expressions. Such as a smile, when the heart is filled with anguish, or expressions of sincerity when the intent is cynical. Oftimes the "wolf in sheep's clothing" makes the desired impression through ability to deceive in the cunning acts of false expression. The arch-criminal is usually clever in hypocracy of gentleness in speech, and mannerisms, smiles, laughter, expressions of emotion, sorrow and repentance; artificial tears and innocent demeanor; all for the purpose of deception and to shield the possessed traits and characteristics of the nature.

It is astonishing to observe the enthusiasm, false sympathy and warm sincerity that many cold-hearted hypocrites can command in voice, gesture and mannerisms.

The brilliant student of analysis is not easily misled, however, as keen observation brings about detection that is hard to foil.

Pathognomical indications are mostly observed through VOICE — SPEECH — SMILES — LAUGHTER — EXPRESSION — GESTURE and MANNERISMS.

VOICE:—The high-pitched feminine voice and the deep masculine voice are analogous as to temperament of the male and female. The deep masculine voice is often assumed to express depth of thought, command or defiance; likewise the high pitched feminine voice. The deep voice commands attention and fear, but it is not friendly, or convincing; and the high pitched, defiant voice betokens the antagonistic Nature. Inflection of voice is readily interpreted even by pet animals, who cannot understand the meaning of words. Voice is a most important means of expressing personality. It can be a mental or a muscular voice; refined or coarse, indicating culture or crudeness.

If cautious, deep and deliberate, the slow acting brain with power of mentality is inferred; and if shrill, and high-pitched the nervous, flighty, superficial, shallow intellectuality is evidenced. The moderate speech of medium pitch is much preferable, denoting suavity of disposition and mental equilibrium.

SPEECH:—Incessant talkativeness is a trait that indicates the poor listener with lack of concentration. The fluent but shallow person, who derives but little knowledge from others and imparts no real information to them. The tiresome, boring individual who rambles along, almost incoherently at times, thinking out loud; and whose mental phenomena seemingly takes place on edges of the lips. Those who love to talk the most have little patience to listen, and are determined to rudely break in upon your narrative and "take the floor" in spite of courtesy or good manners.

This breach of etiquette is one of the gravest errors that the talker can make, as it absolutely destroys respect and causes a feeling of disgust in those who might have been friends. Incessant talkers are more frequent among the female sex, however, the trait is found in both sexes.

Small, slightly built, impulsive, nervous people are more addicted. Large people are more inclined to the deep, slow, sonorous voice and deliberate, thoughtful speech.

The small person thinks, speaks and acts rapidly, as the muscular system is thin and sensitive to irritability; while the muscular system of the large person is antithetical to this condition.

Fast, continuous talkers consume much energy in conversation to their own impoverishment, as failure to use it to develop the brain, by thinking, accounts for the uninteresting and commonplace character of their conversation.

The slow, moderate talker is the good listener, who is always learning from others and in return giving knowledge. Reasoners are not great talkers, for they exert their energy by thinking and cogitating, and live more within the brain than in front of it.

Silent people are the possessors of good memories, therefore, guard well the tongue and be careful what you say to them. The Sphinx-like attitude is possessed and speech seems too much of an effort to be enjoyed. Selfishness and cunning are expressed, while talkative people are more frank and generous.

Dull silence should not be cultivated as it is contrary to geniality and force of character, and oftimes is mistaken for conceited pose. It is better, however, to think without talking than to talk without thinking.

The aggressive temperament is denoted by severe speech, while placidity and the even disposition is evidenced by the modified voice. Lack of intensity or animation in speech betokens inferior energy in work. The forceful talker is an energetic individual.

SMILES AND LAUGHTER:—"The man worth while is one who can smile when everything goes dead wrong." The smile betokens a delightful cheerful moment in the mental phenomena; good-will, sympathy, kindness, generosity, good fellowship, optimism and friendship. "Smile at the world and it will be reflected back to you." The sig-

nificance of words are altered when accompanied with a smile.

There are different kinds of smiles, the sarcastic, supercilious type is annoying, for it savors with the stint of assumed superiority, and denotes the conceited self-willed person, without respect for the feeling of others. The true, sympathetic smile comes from the heart of kindness, affection and generosity, and evidences the sincere, solicitous and benevolent nature. The joyous, light-hearted smile of mirth implies the cheerful, optimistic spirit, that sees the bright side of life. The smile of the wise is possessed of expression, while that of the foolish is without meaning or reason, as it requires mental control to smile *knowingly*.

The hypocrite uses smiles as falsely as words; smiles that lie and are only on the surface. The genuine smile comes from the Spirit, and observation teaches one to detect the true and false smiles. The false face wreathed in smiles of deception can be analyzed by the Humanologist and given the stamp of actuality, making it possible to detect ill-temper, pugnacity, and selfishness, beneath the mask of deceit.

Intelligence, scorn, truth, confidence, friendship, stupidity, suspicion, and assurance can also be expressed by different smiles, all readable and significant.

Laughter is a more pronounced emotion. "The smile breaks into laughter." Therefore, it is more readily discernable than the smile. As a key to character it is important. Common, loud, coarse laughter betokens a like nature; while gentle, moderate laughter implies the refined disposition. Severe, harsh execution indicates a like temperament.

The laugh is as individual as the voice; that of your friend can be discerned among others as far as you can hear it. People of different races laugh as differently as they act. A male and a female laugh is as different as their voices.

The excited laughter denotes impulsiveness and hysterical tendencies, while hearty but uncontrolled laughter im-

plies a sense of humor and joy and light heartedness. The laugh can also be hypocritical, for even though laughter is extremely antithetical to temper, still, merriment, laughter and joyous expressions are often indulged in by those who possess bad temper and irritability. Boisterous, harsh laughter is typical of that disposition which is extreme in all things. This excessiveness is the best key to detection.

The ignorant abuse laughter, using it for purposes that are not within the bounds of mirth and cheer. New thoughts and principles, clothes or anything new or strange excite laughter among the possessors of low mentality. This has oftimes retarded important social and civic advancement, and held back scientific adaptation of theories and principles. They laughed at Christopher Columbus when he wished to sail across the ocean.

Laughter is a great boon to happiness. One cannot but feel the exhileration of cheer and light-heartedness by even forcing laughter. Immediately the mental phenomena changes from serious nerve-straining work to play and relaxation. Just allow the muscles of the mouth to assume the *laughing position* and then observe how impossible it is to worry while in this attitude.

Laughter indicates health of body and mind. The sallow complexion dyspeptic seldom smiles and rarely laughs, little realizing what wonders it might do to lessen the continual pessimistic inclination and restore the mind to health and assist the body.

Be shy and cautious of those who will not laugh when others are enjoying the contagion of cheerfulness. There is a mental note of inferiority or spiteful, selfish, conceited, designing intent. Cold silence oftimes evidences the studied pose of reserve and seriousness, prompted to imply depth of thought and strength of mentality, over and beyond that possessed by others in the group. Silence of this kind becomes self-flattery and implies the narrow, conceited mental outlook; while hearty laughter is at least democratic and friendly, and modest laughter the *music* of the soul.

EXPRESSION:—The glance of the eyes is rich with expression. Deceitfulness of the spoken word may be detected in the eyes. Expressions are so rapid and complicated that keen observation is ever necessary to analyze them. The facial and feature expressions betray joy, sorrow, pain, anguish, hope, despair, passion, frankness, wisdom or stupidity.

The lie cannot be simply spoken, or it would meet with immediate disaster. It must be accompanied with expressions of sincerity and conviction. The face is a mirror upon which our character is reflected and no amount of cunning will remove the stamp of reality that is impressed thereon. Nature builds the countenance and it requires a direct change in traits, moods, and characteristics to altar this imprint.

GESTURE:—Spoken language is a partner to the language of signs. Conversation with the eyes is oftimes more readily understood than by speech. Gesture is a universal language. Clinch the teeth, grip the fists, half close the eyes, frown, and anyone in any part of the world will know that you are in a temper. The eye is quicker than the ear and more acute. It is hard to deceive by gesture; in-so-much that good sleight of hand performers can make a living on the stage just deceiving the eye. People are so accustomed to the contrary condition that they are willing, out of curiosity, to pay for the exception and seeming impossibility.

Profuse gesture implies emotion, nervousness, excitement and hysteria, of the choleric Nature. It is contrary to caution and depth of reason. Humanity is given to the clapping of hands for an expression of mirth or approval or to persuade; while wringing the palms expresses sorrow and anguish. The tightly closed mouth, with lips drawn taut and brows lowered, signifies will-power and firmness.

The sidewise glance is sly, and crafty. We nod our heads in the affirmative, and shake them sideways for the negative. A finger to the lips requests silence, a stern,

stiff expression is the cold, frigid demeanor that implies disgust and hatred.

Some races are more addicted to gesture than others. This is a trait of temperamental natures.

Lip movements without spoken words are a common mode of gesture. The compressed lips are severe, while the loose ones are mild. Broadening the lips gives the smile, while laughter is through the open lips. Animals express their feelings mostly by means of gesture and are keen observers.

Oftimes gestures are made in preference to the spoken word, for clearness of explanation. But much gesture in preference to speech and verbal explanation denotes the ordinary mind incapable of finding words to properly express the thought.

MANNERISMS:—One must be "to the manner born" and cannot deceive in this particular. The cultivated and refined have innate tendencies in everything they do, that clearly affirms their social standards, while no amount of practice will make the thoroughbred out of the unrefined. One class of people may imitate and study to a nicety the manners of others, but never will they reach the perfection that nature imparts through years of custom. The "would be" gentleman overdoes the part, or his movements are studied, unnatural and too cautious; while the natural gentleman acts and speaks in the manner born, and all this by intuition.

One word, or move, or inclination may be the means of betraying the imposter, and it requires the most clever actors to properly assume the manners of others; therefore, a valuable key to human analysis is found in *mannerisms;* they should be carefully studied.

CHAPTER XXI.

Ten Golden Rules of Human-Analysis

To Be Remembered

1. First concentrate upon the most prominent features and determine the meaning expressed.

2. Classify the Nature or Natures that you find expressed. Determine whether the Physical, Muscular or Mental Nature predominates.

3. Pay strict attention to the size and shape of the cranium, with special contemplation of the different districts of the brain.

4. Observe the relative position of the ear as regards the following distances: A—from top of carnium, B—from Anterior area of head. C—from posterior area of head.

5. Take a mental measurement of the general size, height and weight of the person and compare the relative proportion existing between the brain areas and the body.

6. Observe the complexion and texture of the skin; also coarseness and color of the hair.

7. Note especially the expression of the eyes.

8. Analyze the most characteristic and fixed expression of the face and determine the meaning of it.

9. Now study the whole face, considering each feature separately and finally collectively. Compare the features with the brain areas where certain similar meanings are indicated. Find as many single proofs of a trait as possible and as many contradictions of it as can be found, then, *but not until then,* draw your conclusion as to the strength of the trait.

10. Study faces and learn to see them in your "mind's eye". *Acquire a complete knowledge of the meanings of the Six Pure Natures; also of all the features and brain areas.*

POST-TENET

"The dreamy mist has cleared away, and
the ancient myth of life laid bare, upon the
sands of knowledge; after manifold
ways it has troubled, tossed
and turmoiled."

THE END

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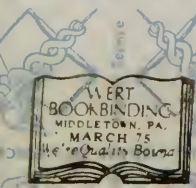

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